

**Fișa cu date de securitate  
AQUAZIP BARRIER PRIMER**

Fișa cu date de securitate din data 07/06/2024 versiunea 2

**SECȚIUNEA 1: Identificarea substanței/amestecului și a societății/întreprinderii**
**1.1. Identificator de produs**

Identificarea preparatului:

Nume comercial: AQUAZIP BARRIER PRIMER

Cod comercial: 1322

UFI: AW8U-P929-G91H-HGMQ

**1.2. Utilizări relevante identificate ale substanței sau ale amestecului și utilizări contraindicate**

Utilizarea recomandată: Amorsă pe bază de rășini sintetice; Numai pentru uz profesional

Utilizări de evitat: Nu este destinat utilizării de către consumator

**1.3. Detalii privind furnizorul fișei cu date de securitate**

Compania: FASSA Srl

Via Lazzaris, 3 - 31027 Spresiano (TV) - ITALY

Tel. +39 0422 7222

Fax +39 0422 887509

Responsabil: laboratorio.spresiano@fassabortolo.it

**1.4. Număr de telefon care poate fi apelat în caz de urgență**

+40213183606

**SECȚIUNEA 2: Identificarea pericolelor**

**2.1. Clasificarea substanței sau a amestecului**
**Regulamentul (CE) nr. 1272/2008 (CLP)**

Flam. Liq. 3 Lichid și vapori inflamabili.  
STOT SE 3 Poate provoca iritarea căilor respiratorii.  
STOT SE 3 Poate provoca somnolență sau amețeală.  
Aquatic Chronic 2 Toxic pentru mediul acvatic cu efecte pe termen lung.  
Efecte fizico-chimice dăunătoare sănătății omului și mediului înconjurător:  
Nici un alt risc

**2.2. Elemente de etichetare**
**Regulamentul (CE) nr. 1272/2008 (CLP)**
**Pictograme de pericol și cuvânt de avertizare**


Atenție

**Fraze de pericol**

H226 Lichid și vapori inflamabili.  
H335 Poate provoca iritarea căilor respiratorii.  
H336 Poate provoca somnolență sau amețeală.  
H411 Toxic pentru mediul acvatic cu efecte pe termen lung.

**Fraze de precauție**

P210 A se păstra departe de surse de căldură, suprafețe fierbinți, scânteii, flăcări și alte surse de aprindere.  
Fumatul interzis.  
P261 Evitați să inspirați fumul/gazul/ceața/vaporii/spray-ul.  
P273 Evitați dispersarea în mediu.  
P280 Purtați mănuși/echipamente de protecție.  
P312 Sunați la un CENTRU DE INFORMARE TOXICOLOGICĂ/un medic dacă nu vă simțiți bine.  
P391 Colectați scurgerile de produs.

**Prevederi speciale:**

EUH066                      Expunerea repetată poate provoca uscarea sau crăparea pielii.

Conține:

Hydrocarbons, C9, aromatics  
acetat de 2-metoxi-1-metiletil

Dispoziții speciale conform Anexei XVII (REACH) cu modificările și completările ulterioare:

Nici una

2.3. Alte pericole

PBT, vPvB sau perturbatori endocrini prezenți în concentrații >= 0,1%:

Componentă	Nr. de Ident.	Cantitate	Proprietăți:
bis(izopropil) naftalen	CAS: 38640-62-9 - EINECS: 254-052-6	>=15 - <20 %	PBT, vPvB

Nici un alt risc

SECȚIUNEA 3: Compoziție/informații privind componenții

3.1. Substanțe

N.A.

3.2. Amestecuri

Identificarea preparatului: AQUAZIP BARRIER PRIMER

Componente periculoase în sensul Regulamentului CLP și clasificarea corespunzătoare:

Cantitate	Nume	Nr. de Ident.	Clasificare	Număr de înregistrare:	Proprietăți:
≥40 - <50 %	Hydrocarbons, C9, aromatics	EC:918-668-5	Flam. Liq. 3, H226; Asp. Tox. 1, H304; STOT SE 3, H335; STOT SE 3, H336; Aquatic Chronic 2, H411, EUH066	01-2119455851-35-xxxx	
≥20 - <25 %	acetat de 2-metoxi-1-metiletil	CAS:108-65-6 EC:203-603-9 Index:607-195-00-7	Flam. Liq. 3, H226; STOT SE 3, H336	01-2119475791-29-xxxx	
≥15 - <20 %	bis(izopropil)naftalen	CAS:38640-62-9 EC:254-052-6	Asp. Tox. 1, H304; Aquatic Chronic 1, H410, M-Chronic:1	01-2119565150-48-xxxx	PBT, vPvB
≥0.05 - <0.1 %	xilen	CAS:1330-20-7 EC:215-535-7 Index:601-022-00-9	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 3, H412  Toxicitate Acută Estimată: ATE - Dermică: 1100mg/kg gc ATE - Inhalare (Vapori): 11mg/l	01-2119488216-32-xxxx	

Notă: orice informație din coloana EC # care începe cu numărul „9” este un EC # Provisional List Number (Număr Provizoriu de Listă) furnizat de ECHA în așteptarea publicării Inventarului european oficial al substanțelor chimice. Următoarea substanță este identificată prin numărul CAS atât în țările care nu fac obiectul reglementărilor REACH, cât și în Reglementările care nu au fost încă actualizate cu noile nomenclaturi ale solvenților pe bază de hidrocarburi. Hydrocarbons, C9, aromatics: CAS 64742-95-6.

SECȚIUNEA 4: Măsuri de prim ajutor

4.1. Descrierea măsurilor de prim ajutor

În caz de contact cu pielea:

- Îndepărtați imediat hainele contaminate și eliminați-l în mod sigur.
- Zonele corpului care au venit, sau se presupune numai că au venit, în contact cu produsul trebuie spălate imediat și abundent cu apă curentă.
- Spălați complet corpul (duș sau baie).

În caz de contact cu ochii:

- În cazul contactului cu ochii, spălați imediat cu multă apă și consultați medicul.

În caz de ingerare:

- Nu provocați vomitarea, adresați-vă unui medic arătând Fișa de Siguranță și eticheta produsului.

În caz de inhalare:

- Conduceți accidentatul la aer liber și țineți-l la cald și în repaus.
- În caz de inhalare consultați de îndată un medic și arătați cutia sau eticheta.

#### 4.2. Cele mai importante simptome și efecte, atât acute, cât și întârziate

Simptomele și efectele sunt cele preconizate în secțiunea 2 cu privire la pericole.

#### 4.3. Indicații privind orice fel de asistență medicală imediată și tratamentele speciale necesare

În caz de accident sau stare proastă consultați imediat un medic (dacă este posibil arătați instrucțiunile de folosință sau fișa de siguranță).

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### SECȚIUNEA 5: Măsuri de combatere a incendiilor

#### 5.1. Mijloace de stingere a incendiilor

Mijloace de stingere corespunzătoare:

CO<sub>2</sub>, stingătoare cu pulbere, spumă, apă pulverizată.

Mijloace de stingere care nu trebuie să fie utilizate din motive de siguranță:

Jeturi de apă.

#### 5.2. Pericole speciale cauzate de substanță sau de amestec

Combustia produce fum greu.

Nu inhalați gazele produse prin explozie și/sau prin combustie (monoxid de carbon, dioxid de carbon, oxizi de azot).

#### 5.3. Recomandări destinate pompierilor

Folosiți dispozitive respiratorii corespunzătoare.

Strângeți separat apa contaminată folosită pentru stingerea incendiului. Nu o descărcați în rețeaua de canalizare.

Dacă este posibil din punct de vedere al siguranței, îndepărtați din zona de pericol imediat recipientele neafectate.

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### SECȚIUNEA 6: Măsuri împotriva pierderilor accidentale

#### 6.1. Precauții personale, echipament de protecție și proceduri de urgență

**Pentru personalul care nu este implicat în situații de urgență:**

Îmbrăcați dispozitivele de protecție individuală.

Îndepărtați orice sursă de aprindere.

În caz de expunere la vapori/pulberi/aerosoli folosiți dispozitive de respirat.

Asigurați o aerisire corespunzătoare.

Utilizați o protecție respiratorie corespunzătoare.

Citiți măsurile de protecție prezentate la punctele 7 și 8.

**Pentru personalul care intervine în situații de urgență:**

Îmbrăcați dispozitivele de protecție individuală.

#### 6.2. Precauții pentru mediul înconjurător

Împiedicați penetrarea în sol/subsol. Împiedicați vărsarea în apele de suprafață sau în rețeaua de canalizare.

În caz de scurgere de gaz sau penetrare în cursuri de apă, sol sau sistemul de canalizare, informați autoritățile răspunzătoare.

#### 6.3. Metode și material pentru izolarea incendiilor și pentru curățenie

Material corespunzător pentru colectare: material absorbant inert (de exemplu, nisip, vermiculit)

Dupa ce produsul a fost recuperat, clătiți suprafața și materialele folosite cu apă

Rețineți apa de spălat contaminată și eliminați-o.

#### 6.4. Trimiteri către alte secțiuni

Vezi și paragrafele 8 și 13

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### SECȚIUNEA 7: Manipulare și depozitare

#### 7.1. Precauții pentru manipularea în condiții de securitate

Evitați contactul cu pielea și ochii, precum și inhalarea vaporilor și a ceții.

Folosiți un sistem de ventilare localizat.

Nu folosiți recipiente goale înainte de a fi curățate.

Înainte operațiilor de transfer, asigurați-vă că în recipiente nu sunt materiale rezidue incompatibile.

**Sfaturi privind igiena generală la locul de muncă:**

Hainele contaminate trebuie înlocuite înainte de accesul la zona de prânz.

Nu mincați sau beți în timpul lucrului

Se face trimitere și la paragraful 8 pentru dispozitivele de protecție recomandate.

#### 7.2. Condiții de depozitare în condiții de securitate, inclusiv eventuale incompatibilități

Păstrați recipientele bine închise într-un spațiu răcoros și bine ventilat, la distanță de surse de căldură.

A se feri de flacări necontrolate, scintei și surse de căldură. Evitați expunerea directă la soare

Țineți departe de alimente, băuturi și hrană pentru animale.

Materiale incompatibile

Vezi pct. 10.5

Instrucțiuni privind spațiile de depozitare:

Răcoros și ventilat corespunzător

#### 7.3. Utilizare (utilizări) finală (finale) specifică (specifice)

Recomandări

## SECȚIUNEA 8: Controale ale expunerii/protecția personală

### 8.1. Parametri de control

#### Lista componentelor cu valoarea OEL

Hydrocarbons, C9, aromatics

Tip OEL ACGIH Termen lung 100 mg/m<sup>3</sup> - 19 ppm

acetat de 2-metoxi-1-metiletil

CAS: 108-65-6	Tip OEL	UE		Termen lung 275 mg/m <sup>3</sup> - 50 ppm; Termen scurt 550 mg/m <sup>3</sup> - 100 ppm Note: Skin
	Tip OEL	MAK	Austria	Termen lung 275 mg/m <sup>3</sup> - 50 ppm; Termen scurt 550 mg/m <sup>3</sup> - 100 ppm
	Tip OEL	MAK	Germania	Termen lung 270 mg/m <sup>3</sup> - 50 ppm; Termen scurt 270 mg/m <sup>3</sup> - 50 ppm
	Tip OEL	VLEP	Belgia	Termen lung 275 mg/m <sup>3</sup> - 50 ppm; Termen scurt 550 mg/m <sup>3</sup> - 100 ppm Note: Additional indication "D" means that the absorption of the agent through the skin, mucous membranes or eyes is an important part of the total exposure. It can be the result of both direct contact and its presence in the air.
	Tip OEL	VLEP	Franța	Termen lung 275 mg/m <sup>3</sup> - 50 ppm; Termen scurt 550 mg/m <sup>3</sup> - 100 ppm
	Tip OEL	VLEP	Italia	Termen lung 275 mg/m <sup>3</sup> - 50 ppm; Termen scurt 550 mg/m <sup>3</sup> - 100 ppm Note: Skin
	Tip OEL	VLEP	România	Termen lung 275 mg/m <sup>3</sup> - 50 ppm; Termen scurt 550 mg/m <sup>3</sup> - 100 ppm Note: Skin
	Tip OEL	TLV	Bulgaria	Termen lung 275 mg/m <sup>3</sup> - 50 ppm; Termen scurt 550 mg/m <sup>3</sup> - 100 ppm Note: Skin
	Tip OEL	TLV	Cehia	Termen lung 270 mg/m <sup>3</sup> - 49.14 ppm; Termen scurt 550 mg/m <sup>3</sup> - 10.01 ppm Note: Skin
	Tip OEL	VLA	Spania	Termen lung 275 mg/m <sup>3</sup> - 50 ppm; Termen scurt 550 mg/m <sup>3</sup> - 100 ppm
	Tip OEL	ÁK	Ungaria	Termen lung 275 mg/m <sup>3</sup> ; Termen scurt 550 mg/m <sup>3</sup>
	Tip OEL	MAC	Olanda	Termen lung 550 mg/m <sup>3</sup>
	Tip OEL	VLE	Portugalia	Termen lung 275 mg/m <sup>3</sup> - 50 ppm; Termen scurt 550 mg/m <sup>3</sup> - 100 ppm Note: Skin
	Tip OEL	SUVA	Elveția	Termen lung 275 mg/m <sup>3</sup> - 50 ppm; Termen scurt 550 mg/m <sup>3</sup> - 100 ppm
	Tip OEL	WEL	U.K.	Termen lung 274 mg/m <sup>3</sup> - 50 ppm; Termen scurt 548 mg/m <sup>3</sup> - 100 ppm
	Tip OEL	GVI	Croația	Termen lung 275 mg/m <sup>3</sup> - 50 ppm; Termen scurt 550 mg/m <sup>3</sup> - 100 ppm Note: Skin
	Tip OEL	AGW	Germania	Termen lung 270 mg/m <sup>3</sup> - 50 ppm; Termen scurt 270 mg/m <sup>3</sup> - 50 ppm
	Tip OEL	NDS	Polonia	Termen lung 260 mg/m <sup>3</sup> ; Termen scurt 520 mg/m <sup>3</sup>
	Tip OEL	MV	Slovenia	Termen lung 275 mg/m <sup>3</sup> - 50 ppm; Termen scurt 550 mg/m <sup>3</sup> - 100 ppm Note: Skin
	Tip OEL	IPRV	Lituania	Termen lung 250 mg/m <sup>3</sup> - 50 ppm; Termen scurt 400 mg/m <sup>3</sup> - 75 ppm Note: Skin
xilen				
CAS: 1330-20-7	Tip OEL	ACGIH		Termen lung 20 ppm Note: A4, IBE - oclr, rspr at, sng, ssnc
	Tip OEL	UE		Termen lung 221 mg/m <sup>3</sup> - 50 ppm; Termen scurt 442 mg/m <sup>3</sup> - 100 ppm Note: Skin
	Tip OEL	MAK	Austria	Termen lung 221 mg/m <sup>3</sup> - 50 ppm; Termen scurt 442 mg/m <sup>3</sup> - 100 ppm
	Tip OEL	MAK	Germania	Termen lung 220 mg/m <sup>3</sup> - 50 ppm; Termen scurt 440 mg/m <sup>3</sup> - 100 ppm Note: Skin
	Tip OEL	VLEP	Belgia	Termen lung 221 mg/m <sup>3</sup> - 50 ppm; Termen scurt 442 mg/m <sup>3</sup> - 100 ppm Note: Additional indication "D" means that the absorption of the agent through the skin, mucous membranes or eyes is an important part of the total exposure. It can be the result of both direct contact and its presence in the air.

Tip OEL	VLEP	Franța	Termen lung 221 mg/m <sup>3</sup> - 50 ppm; Termen scurt 442 mg/m <sup>3</sup> - 100 ppm
Tip OEL	VLEP	Italia	Termen lung 221 mg/m <sup>3</sup> - 50 ppm; Termen scurt 442 mg/m <sup>3</sup> - 100 ppm Note: Skin
Tip OEL	VLEP	România	Termen lung 221 mg/m <sup>3</sup> - 50 ppm; Termen scurt 442 mg/m <sup>3</sup> - 100 ppm
Tip OEL	TLV	Bulgaria	Termen lung 221 mg/m <sup>3</sup> - 50 ppm; Termen scurt 442 mg/m <sup>3</sup> - 100 ppm Note: Skin
Tip OEL	TLV	Cehia	Termen lung 200 mg/m <sup>3</sup> - 45.4 ppm; Termen scurt 400 mg/m <sup>3</sup> - 90.8 ppm Note: Skin
Tip OEL	VLA	Spania	Termen lung 221 mg/m <sup>3</sup> - 50 ppm; Termen scurt 442 mg/m <sup>3</sup> - 100 ppm
Tip OEL	ÁK	Ungaria	Termen lung 221 mg/m <sup>3</sup> ; Termen scurt 442 mg/m <sup>3</sup>
Tip OEL	MAC	Olanda	Termen lung 210 mg/m <sup>3</sup> ; Termen scurt 442 mg/m <sup>3</sup>
Tip OEL	VLE	Portugalia	Termen lung 221 mg/m <sup>3</sup> - 50 ppm; Termen scurt 442 mg/m <sup>3</sup> - 100 ppm Note: Skin
Tip OEL	SUVA	Elveția	Termen lung 435 mg/m <sup>3</sup> - 100 ppm; Termen scurt 870 mg/m <sup>3</sup> - 200 ppm
Tip OEL	WEL	U.K.	Termen lung 220 mg/m <sup>3</sup> - 50 ppm; Termen scurt 441 mg/m <sup>3</sup> - 100 ppm
Tip OEL	GVI	Croația	Termen lung 221 mg/m <sup>3</sup> - 50 ppm; Termen scurt 442 mg/m <sup>3</sup> - 100 ppm Note: Skin
Tip OEL	AGW	Germania	Termen lung 220 mg/m <sup>3</sup> - 50 ppm; Termen scurt 440 mg/m <sup>3</sup> - 100 ppm Note: Skin
Tip OEL	NDS	Polonia	Termen lung 100 mg/m <sup>3</sup> ; Termen scurt 200 mg/m <sup>3</sup> Note: Skin
Tip OEL	MV	Slovenia	Termen lung 221 mg/m <sup>3</sup> - 50 ppm; Termen scurt 442 mg/m <sup>3</sup> - 100 ppm Note: Skin
Tip OEL	IPRV	Lituania	Termen lung 200 mg/m <sup>3</sup> - 50 ppm; Termen scurt 450 mg/m <sup>3</sup> - 100 ppm Note: Skin

### Valori limită de expunere PNEC

acetat de 2-metoxi-1-metiletil

CAS: 108-65-6 Cale de expunere: Apă dulce; PNEC Limită: 0.635 mg/l  
Cale de expunere: Apă sărată; PNEC Limită: 0.064 mg/l  
Cale de expunere: Microorganisme în tratamente de epurare; PNEC Limită: 100 mg/l  
Cale de expunere: Sedimente în apă dulce; PNEC Limită: 3.29 mg/kg  
Cale de expunere: Sedimente în apă sărată; PNEC Limită: 0.329 mg/kg  
Cale de expunere: Sol (agricol); PNEC Limită: 0.29 mg/kg

bis(izopropil)naftalen

CAS: 38640-62-9 Cale de expunere: Apă dulce; PNEC Limită: 0.236 µg/l  
Cale de expunere: Apă sărată; PNEC Limită: 0.023 µg/l  
Cale de expunere: Sedimente în apă dulce; PNEC Limită: 0.853 mg/kg  
Cale de expunere: Sedimente în apă sărată; PNEC Limită: 0.085 mg/kg  
Cale de expunere: Sol (agricol); PNEC Limită: 0.171 mg/kg  
Cale de expunere: Microorganisme în tratamente de epurare; PNEC Limită: 0.15 mg/l

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CAS: 1330-20-7 Cale de expunere: Apă sărată; PNEC Limită: 0.327 mg/l  
Cale de expunere: Apă dulce; PNEC Limită: 0.327 mg/l  
Cale de expunere: Microorganisme în tratamente de epurare; PNEC Limită: 6.58 mg/l  
Cale de expunere: Sedimente în apă sărată; PNEC Limită: 12.46 mg/kg  
Cale de expunere: Sedimente în apă dulce; PNEC Limită: 12.46 mg/kg  
Cale de expunere: Sol (agricol); PNEC Limită: 2.31 mg/kg

### Nivel Derivat Fără Efect (DNEL)

Hydrocarbons, C9, aromatics

Cale de expunere: Epidermic uman; Frecvență de expunere: Pe termen lung, efecte sistemice  
Lucrător profesionist: 25 mg/kg; Consumator: 11 mg/kg

Cale de expunere: Prin inhalare umană; Frecvență de expunere: Pe termen lung, efecte sistemice  
Lucrător profesionist: 150 mg/m<sup>3</sup>; Consumator: 32 mg/m<sup>3</sup>

Cale de expunere: Oral uman; Frecvență de expunere: Pe termen lung, efecte sistemice  
Consumator: 11 mg/kg

acetat de 2-metoxi-1-metiletil

CAS: 108-65-6 Cale de expunere: Epidermic uman; Frecvență de expunere: Pe termen lung, efecte sistemice  
Lucrător profesionist: 796 mg/kg; Consumator: 320 mg/kg

Cale de expunere: Oral uman; Frecvență de expunere: Pe termen lung, efecte sistemice  
Consumator: 36 mg/kg

Cale de expunere: Oral uman; Frecvență de expunere: Pe termen scurt, efecte sistemice  
Consumator: 500 mg/kg

Cale de expunere: Prin inhalare umană; Frecvență de expunere: Pe termen lung, efecte sistemice  
Lucrător profesionist: 275 mg/m<sup>3</sup>; Consumator: 33 mg/m<sup>3</sup>

Cale de expunere: Prin inhalare umană; Frecvență de expunere: Pe termen scurt, efecte locale  
Lucrător profesionist: 550 mg/m<sup>3</sup>

Cale de expunere: Prin inhalare umană; Frecvență de expunere: Pe termen lung, efecte locale  
Consumator: 33 mg/m<sup>3</sup>

bis(izopropil)naftalen

CAS: 38640-62-9 Cale de expunere: Prin inhalare umană; Frecvență de expunere: Pe termen lung, efecte sistemice  
Lucrător profesionist: 30 mg/m<sup>3</sup>; Consumator: 7.4 mg/m<sup>3</sup>

Cale de expunere: Epidermic uman; Frecvență de expunere: Pe termen lung, efecte sistemice  
Lucrător profesionist: 4.3 mg/kg; Consumator: 2.1 mg/kg

Cale de expunere: Oral uman; Frecvență de expunere: Pe termen lung, efecte sistemice  
Consumator: 2.1 mg/kg

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CAS: 1330-20-7 Cale de expunere: Prin inhalare umană; Frecvență de expunere: Pe termen lung, efecte sistemice  
Lucrător profesionist: 221 mg/m<sup>3</sup>; Consumator: 65.3 mg/m<sup>3</sup>

Cale de expunere: Prin inhalare umană; Frecvență de expunere: Pe termen scurt, efecte sistemice  
Lucrător profesionist: 442 mg/m<sup>3</sup>; Consumator: 260 mg/m<sup>3</sup>

Cale de expunere: Prin inhalare umană; Frecvență de expunere: Pe termen scurt, efecte locale  
Lucrător profesionist: 442 mg/m<sup>3</sup>; Consumator: 260 mg/m<sup>3</sup>

Cale de expunere: Prin inhalare umană; Frecvență de expunere: Pe termen lung, efecte locale  
Lucrător profesionist: 221 mg/m<sup>3</sup>; Consumator: 65.3 mg/m<sup>3</sup>

Cale de expunere: Epidermic uman; Frecvență de expunere: Pe termen lung, efecte sistemice  
Lucrător profesionist: 212 mg/kg; Consumator: 125 mg/kg

Cale de expunere: Oral uman; Frecvență de expunere: Pe termen lung, efecte sistemice  
Consumator: 12.5 mg/kg

## 8.2. Controale ale expunerii

Asigurați o ventilație adecvată. Atunci când este rezonabil posibil, aceasta se poate obține prin utilizarea de ventilație de schimb și a unei aspirații generale bune.

Protecția ochilor

Ochelari cu protecție laterală (EN 166).

Protecția pielii

Personalul trebuie să poarte îmbrăcăminte antistatică din fibre naturale sau din fibre sintetice rezistente la temperaturi ridicate.

Protecția mainilor

Nu există niciun material sau combinație de materiale pentru mănuși care să poată garanta o rezistență nelimitată la orice produs chimic sau combinație de produse.

Pentru manipulare prelungită sau repetată, utilizați mănuși rezistente la produse chimice.

Tipul de mănuși adecvate (EN 374/EN 16523); FKM (fluor cauciuc): grosime  $\geq 0.4$  mm; timp de penetrare  $\geq 480$  min. NBR (cauciuc nitrilic): grosime  $\geq 0.4$  mm; timp de penetrare  $\geq 480$  min

Alegerea mănușilor potrivite nu depinde numai de material, ci și de alte caracteristici de calitate care variază de la un producător la altul, precum și de metodele și timpurile de utilizare a amestecului.

Protecție respiratorie

Dacă lucrătorii sunt expuși la concentrații mai mari decât limitele de expunere, trebuie să poarte aparate respiratorii certificate.

Filtru amestec (EN 14387).

Controale de expunere ambientală:

Vezi pct. 6.2

Măsurile de igienă și tehnice

## SECȚIUNEA 9: Proprietățile fizice și chimice

### 9.1. Informații privind proprietățile fizice și chimice de bază

Aspect: Lichid  
Culoare: albicios  
Miros: de solvent  
Pragul de miros: N.D.  
Punctul de topire/punctul de înghețare: N.D.  
Punctul de fierbere sau punctul inițial de fierbere și intervalul de fierbere: N.D.  
Inflamabilitatea: Produsul este clasificat Flam. Liq. 3 H226  
Limita inferioară și superioară de explozie: N.D.  
Punctul de aprindere: 48 °C (118 °F) ( EN ISO 3679 )  
Temperatura de autoaprindere: N.D.  
Temperatura de descompunere: N.D.  
pH: N.A. ( Nu se aplică datorită naturii produsului )  
Viscozitatea cinematică: > 20.5 mm<sup>2</sup>/s (40 °C)  
Densitatea și/sau densitatea relativă: 0.92 ± 0.02 kg/l ( Metoda internă )  
Densitatea relativă a vaporilor: N.D.  
Presiunea vaporilor: N.D.  
Solubilitatea în apă: Insolubil  
Solubilitate în ulei: Nu există date disponibile  
Coeficientul de partiție n-octanol/apă (valoarea log): N.A.

#### Caracteristicile particulei:

Dimensiunea particulei: N.A.

### 9.2. Alte informații

Conductivitatea: N.D.  
Proprietati explozive: N.D.  
Proprietati oxidante: N.D.  
Viteza de evaporare: N.A.

## SECȚIUNEA 10: Stabilitate și reactivitate

### 10.1. Reactivitate

Stabilă în condiții normale

### 10.2. Stabilitate chimică

Stabilă în condiții normale

### 10.3. Posibilitatea de reacții periculoase

Din cauza efectului căldurii sau în caz de incendiu, se pot elibera oxizi de carbon și vapori care pot fi dăunători pentru sănătate.  
A se păstra la distanță de agenți oxidanți, materiale puternic alcaline și puternic acide pentru a evita reacțiile exotermice.

### 10.4. Condiții de evitat

Evitați apropierea de surse de căldură.

### 10.5. Materiale incompatibile

Evitați contactul cu materiale oxidante. Produsul ar putea să se aprindă.  
Vezi pct. 10.3

### 10.6. Produși de descompunere periculoși

În cazul depozitării și manipulării adecvate, nu există produse de descompunere periculoase.  
Vezi pct. 5.2

## SECȚIUNEA 11: Informații toxicologice

### 11.1. Informații privind clasele de pericol definite în Regulamentul (CE) nr. 1272/2008

#### Informații toxicologice ale produsului:

a) toxicitate acută	Neclasificat Pe baza datelor disponibile, criteriile de clasificare nu sunt îndeplinite.
b) corodarea/iritarea pielii	Neclasificat Pe baza datelor disponibile, criteriile de clasificare nu sunt îndeplinite.
c) lezarea gravă/iritarea ochilor	Neclasificat Pe baza datelor disponibile, criteriile de clasificare nu sunt îndeplinite.
d) sensibilizarea căilor respiratorii sau a pielii	Neclasificat

e) mutagenitatea celulelor germinative	Pe baza datelor disponibile, criteriile de clasificare nu sunt îndeplinite. Neclasificat
f) cancerogenitatea	Pe baza datelor disponibile, criteriile de clasificare nu sunt îndeplinite. Neclasificat
g) toxicitatea pentru reproducere	Pe baza datelor disponibile, criteriile de clasificare nu sunt îndeplinite. Neclasificat
h) STOT (toxicitate asupra organelor țintă specifice) - expunere unică	Pe baza datelor disponibile, criteriile de clasificare nu sunt îndeplinite. Produsul este clasificat: STOT SE 3(H335), STOT SE 3(H336)
i) STOT (toxicitate asupra organelor țintă specifice) - expunere repetată	Neclasificat
j) pericol prin aspirare	Pe baza datelor disponibile, criteriile de clasificare nu sunt îndeplinite. Neclasificat

**Informații toxicologice referitoare la substanțele principale găsite în acest produs:**

Hydrocarbons, C9, aromatics

a) toxicitate acută	LD50 Oral Șobolan 3492 mg/kg LD50 Piele Iepure > 3160 mg/kg LC50 Vapor de inhalare Șobolan > 6193 mg/m <sup>3</sup> 4h
---------------------	--

acetat de 2-metoxi-1-metiletil

CAS: 108-65-6 a) toxicitate acută	LD50 Oral Șobolan > 5000 mg/kg LD50 Piele Iepure > 5000 mg/kg LC0 Vapor de inhalare Șobolan > 4345 ppm 6h
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bis(izopropil)naftalen

CAS: 38640-62-9 a) toxicitate acută	LD50 Oral Șobolan > 4000 mg/kg LC50 Piele Șobolan > 4000 mg/kg LC50 Inhalări de aerosoli Șobolan > 5.6 mg/l
-------------------------------------	---

xilen

CAS: 1330-20-7 a) toxicitate acută	ATE - Dermică: 1100 mg/kg gc ATE - Inhalare (Vapori): 11 mg/l LD50 Oral Șobolan 3523 mg/kg
------------------------------------	--

**11.2. Informații privind alte pericole**

**Proprietăți de perturbator endocrin:**

Nu conține perturbatori endocrini prezenți în concentrații  $\geq 0,1\%$

**SECȚIUNEA 12: Informații ecologice**

A se adopta bune practici de producție astfel încât produsul să nu fie eliberat în mediu

**12.1. Toxicitate**

Informații Ecotoxicologice:

Toxic pentru mediul acvatic cu efecte pe termen lung.

**Lista proprietăților Eco-toxicologice ale produsului**

Produsul este clasificat: Aquatic Chronic 2(H411)

**Lista componentelor cu proprietăți ecotoxicologice**

Hydrocarbons, C9, aromatics

a) Toxicitate acvatică acută: EL50 Daphnia 3.2 mg/l 48h
a) Toxicitate acvatică acută: ErL50 Alge 2.9 mg/l 72h
a) Toxicitate acvatică acută: LC50 Pește 9.2 mg/l 96h

acetat de 2-metoxi-1-metiletil

CAS: 108-65-6 a) Toxicitate acvatică acută: LC50 Pește 134 mg/l 96h
a) Toxicitate acvatică acută: EC50 Daphnia 408 mg/l 48h



- a) Toxicitate acvatică acută: EC50 Alge > 1000 mg/l 96h  
b) Toxicitatea acvatică cronică: NOEC Pește 47.5 mg/l - 14 d

bis(izopropil)naftalen

CAS: 38640-62-9 a) Toxicitate acvatică acută: LC0 Pește 0.5 mg/l 96h

a) Toxicitate acvatică acută: EC0 Daphnia 0.16 mg/l 48h

a) Toxicitate acvatică acută: EC0 Alge 0.15 mg/l 72h

b) Toxicitatea acvatică cronică: NOEC Daphnia 0.013 mg/l 21d

## 12.2. Persistență și degradabilitate

Hydrocarbons, C9, aromatics

Degradabil în mod rapid

acetat de 2-metoxi-1-metiletil

CAS: 108-65-6 Degradabil în mod rapid

xilen

CAS: 1330-20-7 Degradabil în mod rapid

## 12.3. Potențial de bioacumulare

xilen

CAS: 1330-20-7 Nu este supus  
bioacumulării

## 12.4. Mobilitate în sol

xilen

CAS: 1330-20-7 Mobil

## 12.5. Rezultatele evaluărilor PBT și vPvB

### Lista componentelor cu proprietăți ecotoxicologice

bis(izopropil)naftalen

CAS: 38640-62-9  $\geq 15$  -  $< 20$  % PBT - vPvB

## 12.6. Proprietăți de perturbator endocrin

Nu conține perturbatori endocrini prezenți în concentrații  $\geq 0,1\%$

## 12.7. Alte efecte adverse

N.A.

# SECȚIUNEA 13: Considerații privind eliminarea

## 13.1. Metode de tratare a deșeurilor

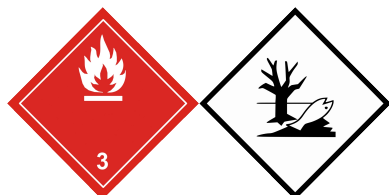
A se recupera, dacă este posibil. A se trimite către punctele de depozitare sau de incinerare, în condiții controlate. A se respecta regulamentele locale în vigoare

Nu permiteți pătrunderea produsului în sistemul de canalizare sau în cursurile de apă.

Recipientele contaminate cu produs, în conformitate cu dispozițiile legale locale sau naționale.

Odată ce produsul a expirat, acesta trebuie eliminat în conformitate cu reglementările în vigoare.

# SECȚIUNEA 14: Informații referitoare la transport



## 14.1. Numărul ONU sau numărul de identificare

1263

## 14.2. Denumirea corectă ONU pentru expediție

ADR-Nume transport îmbarcare: VOPSELE

IATA-Nume transport îmbarcare: PAINT

IMDG-Nume transport îmbarcare: PAINT

## 14.3. Clasa (clasele) de pericol pentru transport

ADR-clasa: 3

IATA-Clasa: 3

IMDG-Clasa: 3

#### 14.4. Grupul de ambalare

ADR-Grup Ambalare: III

IATA-Grup Ambalare: III

IMDG-Grup Ambalare: III

#### 14.5. Pericole pentru mediul înconjurător

Componentul toxic principal: bis(izopropil)naftalen

Poluant marin: Da

Poluant ambiental: Da

IMDG-EMS: F-E, S-E

#### 14.6. Precauții speciale pentru utilizatori

Drumuri și Căi Ferate (ADR-RID):

ADR-Etichetă: 3

ADR - Număr de identificare a pericolului: -

ADR-Dispoziții Speciale: 163 367 650

ADR-Cod de restricție în tunel:

Aer (IATA):

IATA-Aeronavă de pasagerit: 355

IATA-Aeronavă de marfă: 366

IATA-Etichetă: 3

IATA-Riscul secundar: -

IATA-Erg: 3L

IATA-Dispoziții Speciale: A3 A72 A192

Mare (IMDG):

IMDG-Depozitare și manipulare: Category A

IMDG-Segregare: -

IMDG-Riscul secundar: -

IMDG-Dispoziții Speciale: 163 223 367 955

#### 14.7. Transportul maritim în vrac în conformitate cu instrumentele OMI

N.A.

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### SECȚIUNEA 15: Informații de reglementare

#### 15.1. Regulamente/legislație în domeniul securității, al sănătății și al mediului specifice (specifică) pentru substanța sau amestecul în cauză

Directiva 98/24/CE (Riscuri în legătură cu agenții chimici la locul de muncă)

Directiva 2000/39/CE (Valori limită a expunerii profesionale)

Directiva 2010/75/UE

Regulamentul (CE) nr. 1907/2006 (REACH)

Regulamentul (CE) nr. 1272/2008 (CLP)

Regulamentul (CE) nr. 790/2009 (ATP 1 CLP) și (EU) nr. 758/2013

Regulamentul (EU) nr. 2020/878

Regulamentul (EU) nr. 286/2011 (ATP 2 CLP)

Regulamentul (EU) nr. 618/2012 (ATP 3 CLP)

Regulamentul (EU) nr. 487/2013 (ATP 4 CLP)

Regulamentul (EU) nr. 944/2013 (ATP 5 CLP)

Regulamentul (EU) nr. 605/2014 (ATP 6 CLP)

Regulamentul (EU) nr. 2015/1221 (ATP 7 CLP)

Regulamentul (EU) nr. 2016/918 (ATP 8 CLP)

Regulamentul (EU) nr. 2016/1179 (ATP 9 CLP)

Regulamentul (EU) nr. 2017/776 (ATP 10 CLP)

Regulamentul (EU) nr. 2018/669 (ATP 11 CLP)

Regulamentul (EU) nr. 2018/1480 (ATP 13 CLP)

Regulamentul (EU) nr. 2019/521 (ATP 12 CLP)

Regulamentul (EU) nr. 2020/217 (ATP 14 CLP)

Regulamentul (EU) nr. 2020/1182 (ATP 15 CLP)

Regulamentul (EU) nr. 2021/643 (ATP 16 CLP)

Regulamentul (EU) nr. 2021/849 (ATP 17 CLP)

Regulamentul (EU) nr. 2022/692 (ATP 18 CLP)

**Restricții referitoare la produsele sau substanțele conținute de acestea conform Anexei XVII Regulamentul (CE) 1907/2006 (REACH) cu modificările ulterioare:**

Restricții referitoare la produs: 3, 40  
Restricții referitoare la substanțele conținute: 30 (CAS 70657-70-4), 75

**Dispoziții în legătură cu directiva EU 2012/18 (Seveso III):**

Categoria Seveso III conform Anexei 1, partea 1	Limită nivel inferior (tone)	Limită nivel superior (tone)
Produsul face parte din categoria: P5c	5000	50000
Produsul face parte din categoria: E2	200	500

**Regulamentul (UE) nr. 649/2012 (Regulamentul PIC)**

Nu există substanțe menționate  
**Clasa Germană a Periculozității Apei**  
Clasa 3: foarte periculos.

**Substanțe SVHC:**  
În baza datelor disponibile, produsul nu conține substanțe SVHC în procentaj  $\geq$  de 0.1%.

**Valoarea limită UE pentru conținutul de COV (Directiva 2004/42/CE)** Cat. A/h: 750 g/l; COV < 750 g/l

**15.2. Evaluarea securității chimice**  
Nu a fost efectuată nici o Evaluare de Securitate Chimică pentru amestecul

**SECȚIUNEA 16: Alte informații**

Cod	Descriere
EUH066	Expunerea repetată poate provoca uscarea sau crăparea pielii.
H226	Lichid și vapori inflamabili.
H304	Poate fi mortal în caz de înghițire și de pătrundere în căile respiratorii.
H312	Nociv în contact cu pielea.
H315	Provoacă iritarea pielii.
H319	Provoacă o iritare gravă a ochilor.
H332	Nociv în caz de inhalare.
H335	Poate provoca iritarea căilor respiratorii.
H336	Poate provoca somnolență sau amețeală.
H373	Poate provoca daune organelor în caz de expunere îndelungată sau repetată prin inhalare și prin înghițire.
H410	Foarte toxic pentru mediul acvatic cu efecte pe termen lung.
H411	Toxic pentru mediul acvatic cu efecte pe termen lung.
H412	Nociv pentru mediul acvatic cu efecte pe termen lung.

Cod	Clasa de pericol și categoria de pericol	Descriere
2.6/3	Flam. Liq. 3	Lichid inflamabil, Categoria 3
3.1/4/Dermal	Acute Tox. 4	Toxicitate acută (dermică), Categoria 4
3.1/4/Inhal	Acute Tox. 4	Toxicitate acută (inhalare), Categoria 4
3.10/1	Asp. Tox. 1	Pericol prin aspirare, Categoria 1
3.2/2	Skin Irrit. 2	Iritarea pielii, Categoria 2
3.3/2	Eye Irrit. 2	Iritarea ochilor, Categoria 2
3.8/3	STOT SE 3	Toxicitate asupra unui organ țintă specific – o singură expunere, Categoria 3
3.9/2	STOT RE 2	Toxicitate asupra unui organ țintă specific – expunere repetată, Categoria 2
4.1/C1	Aquatic Chronic 1	Pericol cronic (pe termen lung) pentru mediul acvatic, Categoria 1
4.1/C2	Aquatic Chronic 2	Pericol cronic (pe termen lung) pentru mediul acvatic, Categoria 2
4.1/C3	Aquatic Chronic 3	Pericol cronic (pe termen lung) pentru mediul acvatic, Categoria 3

**Clasificarea și procedura utilizate pentru realizarea clasificării pentru amestecuri în conformitate cu Regulamentul (CE) nr. 1272/2008 [CLP]:**

Clasificare conform Regulamentului (CE) nr. 1272/2008	Procedura de clasificare
Flam. Liq. 3, H226	Evaluare pe baza substanțelor conținute

STOT SE 3, H335	Metoda de calcul
STOT SE 3, H336	Metoda de calcul
Aquatic Chronic 2, H411	Metoda de calcul

Acest document a fost întocmit de un tehnician competent în domeniul SDS și care este pregătit în mod corespunzător.

Principalele surse bibliografice:

ECDIN - Rețeaua de date și informații de mediu privind produsele chimice - Centrul comun de cercetare, Comisia Comunităților Europene

SAX PROPRIETĂȚI PERICULOASE ALE MATERIALELOR INDUSTRIALE - Ediția a opta - Van Nostrand Reinold

Fișe tehnice de securitate ale furnizorilor de materii prime.

Aceste informații se bazează pe cunoștințele deținute la data menționată mai sus. Se referă numai la produsul menționat și nu constituie o garanție a calității pentru cazurile particulare

Este de datoria utilizatorului să se asigure că aceste informații sunt adecvate și corespund domeniului specific de utilizare

Această FTS anulează și înlocuiește pe cele emise anterior.

Legenda cu abrevierile și acronimele folosite în fișa cu date de securitate

ACGIH: Conferința Americană a Igieniştilor Industriali Guvernamentali

ADR: Acordul European referitor la Încărcătura Internațională de Bunuri Periculoase pe Drumuri

ATE: Toxicitate Acută Estimată

ATEmix: Estimarea toxicității acute (Amestecuri)

BEI: Index de Expunere Biologică

CAS: Chemical Abstracts Service (departament al Societății Americane de Chimie)

CAV: Centrul de Otrăvuri

CE: Comunitatea Europeană

CLP: Clasificare, Etichetare, Ambalare

CMR: Cancerigene, Mutagene și Toxice pentru reproducere

COV: Compus Organic Volatil

CSA: Evaluarea Securității Chimice

CSR: Raportul Securității Chimice

DNEL: Nivel Derivat Fără Efect

EC50: Jumătate din Concentrația Efectivă Maximă

ECHA: Agenția Europeană pentru Produse Chimice

EINECS: Inventarul European al Substanțelor Chimice Existente pe piață

ES: Scenariul de Expunere

GefStoffVO: Ordonanță în legătură cu Substanțele Periculoase, Germania

GHS: Sistemul Mondial Armonizat de Clasificare și Etichetare a Produselor Chimice

IARC: Agenția Internațională pentru Cercetare în Domeniul Cancerului

IATA: Asociația Internațională de Transport Aerian

IC50: jumătate din concentrația inhibitorie maximă

IMDG: Coduri Maritime Internaționale pentru Bunurile Periculoase

LC50: Concentrația letală pentru un procent de 50% din populația test

LD50: Doza letală pentru un procent de 50% din populația test

LDLo: Doză Letală Scăzută

N.A.: Nu se aplică

N/A: Nu se aplică

N/D: Nedefinit/Nu este disponibil

N.D.: Nu este disponibil

NIOSH: Institutul Național pentru Securitate și Sănătate în Muncă

NOAEL: Nu există un Nivel al Efectelor Adverse Observat

OSHA: Administrația Securității și Sănătății în Muncă.

PBT: Persistente, Bioacumulative și Toxice

PGK: Instrucțiuni de ambalare

PNEC: Concentrația Fără Efect Prevăzută

PSG: Pasageri

RID: Regulamentul Referitor la Transportul Internațional de Bunuri Periculoase pe Calea Ferată

STEL: Limita de Expunere pe Termen Scurt

STOT: Toxicitatea pentru Organul Țintă Specific

TLV: Valoarea Limită a Pragului

TLV-TWA: Valoarea Limită a Pragului pentru Durata Ponderată Medie 8 ore pe zi (Standard ACGIH)

vPvB: Foarte Persistent, Foarte Bioacumulativ.

WGK: Clasa Germană a Periculozității Apei

#### **Paragrafe modificate de la ultima revizuire:**

- SECȚIUNEA 1: Identificarea substanței/amestecului și a societății/întreprinderii
- SECȚIUNEA 8: Controale ale expunerii/protecția personală

- SECȚIUNEA 9: Proprietățile fizice și chimice
- SECȚIUNEA 11: Informații toxicologice
- SECȚIUNEA 12: Informații ecologice
- SECȚIUNEA 13: Considerații privind eliminarea
- SECȚIUNEA 14: Informații referitoare la transport
- SECȚIUNEA 15: Informații de reglementare
- SECȚIUNEA 16: Alte informații

# Bis(isopropyl)naphthalene

## Substance identification

**Chemical Name:** bis(isopropyl)naphthalene

**EC number:** 254-052-6

**CAS number:** 38640-62-9

**Date - Version:** 01/18/2018 v.1

## SECTION 1: TITLE - Use in coatings - Industrial

### List of use descriptors

**Name of identified use:** Use in coatings - Industrial: SU03; PROC01, PROC02 PROC03, PROC05, PROC07, PROC08a, PROC08b, PROC10, PROC13, PROC15; ERC05

**Process category:** PROC01, PROC02, PROC03, PROC05, PROC07, PROC08a, PROC08b, PROC10, PROC13, PROC15

**Substance supplied for such use in the form of:** As-it-is

**End use sector:** SU06a, SU13, SU16, SU17, SU18, SU19

**Environmental Release Category** ERC05

### Environmental contributing scenario:

Use in coatings - ERC05

### Worker contributing scenario(s):

Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions [PROC1]

Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions [PROC2]

Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment conditions [PROC3].

Use of materials at industrial sites in open batch processes [PROC5].

Industrial Spray Applications [PROC7].

Transfer of substance or preparation (charging/discharging) at non dedicated facilities [PROC8a].

Transfer of substance or preparation (charging/discharging) at dedicated facilities [PROC8b].

Roller, spray and flow application [PROC10].

Treatment of articles by dipping and pouring [PROC13].

Use as laboratory reagent [PROC15].

## SECTION 2: EXPOSURE CONTROLS

### CONTRIBUTING SCENARIO THAT CONTROLS ENVIRONMENTAL EXPOSURE

#### Quantity used

Daily amount per site:  $\leq 5.3$  tons/day.

Annual amount per site:  $\leq 1200$  tons/year.

Issue days: 225 days a year.

Percentage of EU tonnage used at regional scale: 100 %.

#### Other conditions concerning environmental exposure

Receiving surface water flow rate:  $\geq 18000$  m<sup>3</sup>/day.

Fattore di rilascio dopo la gestione del rischio in loco:

Emissions to process waste water: 0 % (CEPE SPERC 5.1a.v1)

Process air emissions: 0.1 % (CEPE SPERC 5.1a.v1)

Soil emissions from process: 0 % (CEPE SPERC 5.1a.v1)

#### On-site conditions and technical measures to reduce or limit discharges, emissions to air and releases to soil

Wet blast chiller or filtration: (Air - minimum efficiency: 95 %).

#### Conditions and measures related to sewage treatment plants

Wastewater treatment plant: Yes. (Efficiency of at least 85.29 %)

Discharge rate:  $\geq 2000$  m<sup>3</sup>/day.

Application of STP sludge on agricultural land: Yes.

## CONTRIBUTING SCENARIO THAT CONTROLS WORKERS' EXPOSURE

### *Other conditions regarding workers' exposure*

Do not swallow.  
Avoid splashes.  
Avoid contact with contaminated tools and objects.

### *Organisational measures to avoid/limit releases, dispersion and exposure.*

Personnel training on good practice.  
On-site supervision to check that the Risk Management Measures (RMMs) in place are being used correctly and the Operational Conditions (OCs) are being followed.  
Sensitisers - Subject to relevant national legislation, pre-employment screening and appropriate health surveillance.

### *Conditions and measures for personal protection, hygiene and health assessments*

Good level of personal hygiene.  
Assumes a good basic standard of occupational hygiene is implemented.

## SECTION 3: Exposure estimation and reference to its source

### *Exposure assessment (environment):*

EUSES v2.1.2

#### *Exposure estimation:*

**Fresh water:** 0.000000887 mg/l

**RCR:** <0.01

**Freshwater sediments:** 0.00321 mg/Kg dwt

**RCR:** <0.01

**Sea water:** 0.000000016 mg/l.

**RCR:** <0.01

**Marine sediment:** 0.0000579 mg/kg dwt

**RCR:** <0.01

**Wastewater treatment plant:** 0 mg/l

**RCR:** <0.01

**Soil:** 0.012 mg/kg dwt

**RCR:** 0.677

Based on the applied risk management the risk to the environment is sufficiently controlled, RCR<1

### *Exposure assessment (human):*

A qualitative approach was used to conclude that it is safe to use.

## SECTION 4: Indications for the downstream user to assess whether he works within the limits established by ES.

### *Generals*

The downstream user is required to assess that the operating conditions and risk management measures described in the exposure scenario are suitable for his/her use.

Where other OCs/RMMs are adopted, the user should ensure that risks are managed to at least equivalent levels.

***The risk assessment methods/tools specified in Section 3 can be used for this assessment.***

### *Environment*

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

If scaling reveals a condition of unsafe use [i.e. risk characterisation ratio (RCR) > 1], additional risk management measures (RMM) or a site-specific chemical safety assessment or a site-specific chemical safety assessment will be required.

Further details on scaling and control technologies are provided in the SPERC

## SECTION 1: TITLE - Use in coatings - Inside - Professional

### *List of use descriptors*

**Name of identified use:** Use in coatings - Inside - Professional: SU22; PROC05, PROC08a PROC10, PROC11, PROC13, PROC19; ERC08c

**Process category:** PROC05, PROC08a PROC10, PROC11, PROC13, PROC19

**Substance supplied for such use in the form of:** As-it-is

**End use sector:** SU06a, SU13, SU16, SU17, SU18, SU19

**Subsequent service life relevant to that use:** No.

**Environmental Release Category** ERC08c

**Market sector by type of chemical product:** PC09a

### *Environmental contributing scenario:*

Use in coatings-ERC08c

### *Worker contributing scenario(s):*

Use of materials at industrial sites in open batch processes [PROC5].  
Transfer of substance or preparation (charging/discharging) at non dedicated facilities [PROC8a].  
Roller application or brushing [PROC10]  
Non-industrial spray application [PROC11].  
Treatment of articles by dipping and pouring [PROC13].  
Manual activities with direct contact [PROC19].

## SECTION 2: EXPOSURE CONTROLS

### CONTRIBUTING SCENARIO THAT CONTROLS ENVIRONMENTAL EXPOSURE

#### **Quantity used**

Daily amount of local widespread use:  $\leq 0,00014$  Tons/day

#### **Other conditions concerning environmental exposure**

Emissions to process waste water: 0 % (CEPE SPERC 8c.3a.v1)

Process air emissions: 2.2 % (CEPE SPERC 8c.3a.v1)

Soil emissions from process: 0 % (CEPE SPERC 8c.3a.v1)

#### **Process-level conditions and technical measures (source) to prevent release**

Indoor use

Professional use.

#### **Conditions and measures related to sewage treatment plants**

Wastewater treatment plant: Yes. (Efficiency of at least 85.29 %)

### CONTRIBUTING SCENARIO THAT CONTROLS WORKERS' EXPOSURE

#### **Other conditions regarding workers' exposure**

Do not swallow.

Avoid splashes.

Avoid contact with contaminated tools and objects.

#### **Organisational measures to avoid/limit releases, dispersion and exposure.**

Personnel training on good practice.

On-site supervision to check that the Risk Management Measures (RMMs) in place are being used correctly and the Operational Conditions (OCs) are being followed.

#### **Conditions and measures for personal protection, hygiene and health assessments**

Good level of personal hygiene.

Assumes a good basic standard of occupational hygiene is implemented.

## SECTION 3: Exposure estimation and reference to its source

#### **Exposure assessment (environment):**

EUSES v2.1.2

#### **Exposure estimation:**

**Fresh water:** 0.000000887 mg/l

**RCR:** <0.01

**Freshwater sediments:** 0.00321 mg/Kg dwt

**RCR:** <0.01

**Sea water:** 0.000000016 mg/l.

**RCR:** <0.01

**Marine sediment:** 0.0000579 mg/kg dwt

**RCR:** <0.01

**Wastewater treatment plant:** 0 mg/l

**RCR:** <0.01

**Soil:** 0.000076 mg/kg peso secco

**RCR:** <0.01

Based on the applied risk management the risk to the environment is sufficiently controlled, RCR<1

#### **Exposure assessment (human):**

A qualitative approach was used to conclude that it is safe to use.

## SECTION 4: Indications for the downstream user to assess whether he works within the limits established by ES.

#### **Generals**

The downstream user is required to assess that the operating conditions and risk management measures described in the exposure scenario are suitable for his/her use.

Where other OCs/RMMs are adopted, the user should ensure that risks are managed to at least equivalent levels.

**The risk assessment methods/tools specified in Section 3 can be used for this assessment.**

#### **Environment**

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

If scaling reveals a condition of unsafe use [i.e. risk characterisation ratio (RCR) > 1], additional risk management measures (RMM) or a site-specific chemical safety assessment or a site-specific chemical safety assessment will be required.

Further details on scaling and control technologies are provided in the SPERC



## SECTION 1: TITLE - Use in coatings - Outdoor - Professional

### List of use descriptors

**Name of identified use:** Use in coatings - Outdoor - Professional: SU22; PROC05, PROC08a PROC10, PROC11, PROC13, PROC19; ERC08f

**Process category:** PROC05, PROC08a PROC10, PROC11, PROC13, PROC19

**Substance supplied for such use in the form of:** As-it-is

**End use sector:** SU06a, SU13, SU16, SU17, SU18, SU19

**Subsequent service life relevant to that use:** No.

**Environmental Release Category** ERC08f

**Market sector by type of chemical product:** PC09a

### Environmental contributing scenario:

Use in coatings - ERC08f

### Worker contributing scenario(s):

Use of materials at industrial sites in open batch processes [PROC5].

Transfer of substance or preparation (charging/discharging) at non dedicated facilities [PROC8a].

Roller application or brushing [PROC10]

Non-industrial spray application [PROC11].

Treatment of articles by dipping and pouring [PROC13].

Manual activities with direct contact [PROC19].

## SECTION 2: EXPOSURE CONTROLS

### CONTRIBUTING SCENARIO THAT CONTROLS ENVIRONMENTAL EXPOSURE

#### Quantity used

Daily amount of local widespread use:  $\leq 0,00011$  Tons/day

Percentage of EU tonnage used at regional scale: 10%

#### Other conditions concerning environmental exposure

Emissions to process waste water: 1 % (CEPE SPERC 8f.2a.v1)

Process air emissions: 0 % (CEPE SPERC 8f.2a.v1)

Soil emissions from process: 0.5 % (CEPE SPERC 8f.2a.v1)

#### Process-level conditions and technical measures (source) to prevent release

Outdoor use

Professional use.

#### Conditions and measures related to sewage treatment plants

Wastewater treatment plant: Yes. (Efficiency of at least 85.29 %)

### CONTRIBUTING SCENARIO THAT CONTROLS WORKERS' EXPOSURE

#### Other conditions regarding workers' exposure

Do not swallow.

Avoid splashes.

Avoid contact with contaminated tools and objects.

#### Organisational measures to avoid/limit releases, dispersion and exposure.

Personnel training on good practice.

On-site supervision to check that the Risk Management Measures (RMMs) in place are being used correctly and the Operational Conditions (OCs) are being followed.

#### Conditions and measures for personal protection, hygiene and health assessments

Good level of personal hygiene.

Assumes a good basic standard of occupational hygiene is implemented.

## SECTION 3: Exposure estimation and reference to its source

### Exposure assessment (environment):

EUSES v2.1.2

#### Exposure estimation:

**Fresh water:** 0.00000848 mg/l

**RCR:** 0.036

**Freshwater sediments:** 0.031 mg/Kg dwt

**RCR:** 0.359

**Sea water:** 0.000000775 mg/l.

**RCR:** 0.033

**Marine sediment:** 0.0028 mg/kg dwt

**RCR:** 0.329

**Wastewater treatment plant:** 0.00008 mg/l

**RCR:** <0.01

**Soil:** 0.015 mg/kg dwt

**RCR:** 0.891

Based on the applied risk management the risk to the environment is sufficiently controlled, RCR<1

#### Exposure assessment (human):

A qualitative approach was used to conclude that it is safe to use.

## SECTION 4: Indications for the downstream user to assess whether he works within the limits established by ES.

### Generals

The downstream user is required to assess that the operating conditions and risk management measures described in the exposure scenario are suitable for his/her use.

Where other OCs/RMMs are adopted, the user should ensure that risks are managed to at least equivalent levels.

**The risk assessment methods/tools specified in Section 3 can be used for this assessment.**

### Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

If scaling reveals a condition of unsafe use [i.e. risk characterisation ratio (RCR) > 1], additional risk management measures (RMM) or a site-specific chemical safety assessment or a site-specific chemical safety assessment will be required.

Further details on scaling and control technologies are provided in the SPERC

## SECTION 1: TITLE - Use in coatings - Consumer good

### List of use descriptors

**Name of identified use:** Use in coatings - Consumer good: SU21; PC09a, PC09b; ERC08c, ERC08f

**Substance supplied for such use in the form of:** As-it-is

**Subsequent service life relevant to that use:** Yes.

**Environmental Release Category** ERC08c, ERC08f

**Market sector by type of chemical product:** PC09a, PC09b

### Environmental contributing scenario:

Use in coatings - ERC08c

Use in coatings - ERC08f

### Worker contributing scenario(s):

coatings and paints, thinners, pickling solutions (PC9a)

additives, fillers, plasters, modeling clay (PC9b)

## SECTION 2: EXPOSURE CONTROLS

### CONTRIBUTING SCENARIO THAT CONTROLS ENVIRONMENTAL EXPOSURE 1

#### Quantity used

Daily amount of local widespread use: ≤ 0,0000011 Tons/day

#### Other conditions concerning environmental exposure

Emissions to process waste water: 1 % (CEPE SPERC 8c.1a.v1)

Process air emissions: 0 % (CEPE SPERC 8c.1a.v1)

Soil emissions from process: 0 % (CEPE SPERC 8c.1a.v1)

#### Conditions and measures related to sewage treatment plants

Wastewater treatment plant: Yes. (Efficiency of at least 85.29 %)

## SECTION 2: EXPOSURE CONTROLS

### CONTRIBUTING SCENARIO THAT CONTROLS ENVIRONMENTAL EXPOSURE 2

#### Quantity used

Daily amount of local widespread use: ≤ 0,0000011 Tons/day

#### Other conditions concerning environmental exposure

Emissions to process waste water: 1 % (CEPE SPERC 8f.1a.v1)

Process air emissions: 0 % (CEPE SPERC 8f.1a.v1)

Soil emissions from process: 0.5 % (CEPE SPERC 8f.1a.v1)

#### Conditions and measures related to sewage treatment plants

Wastewater treatment plant: Yes. (Efficiency of at least 85.29 %)

CONTRIBUTING SCENARIO CONTROLLING CONSUMERS EXPOSURE 3

#### Coatings and paints, thinners, pickling solutions (PC9a)

Use of the substance is considered safe for the consumer if operating within the limits established by the exposure scenario; therefore, if complying with the operating conditions and risk management measures set out above.

CONTRIBUTING SCENARIO CONTROLLING CONSUMERS EXPOSURE 4

#### Additives, fillers, plasters, modeling clay (PC9b)

Use of the substance is considered safe for the consumer if operating within the limits established by the exposure scenario; therefore, if complying with the operating conditions and risk management measures set out above.

### SECTION 3: Exposure estimation and reference to its source

#### **Exposure assessment (environment): 1**

EUSES v2.1.2

##### **Exposure estimation:**

**Fresh water:** 0.000000946 mg/l

**RCR:** <0.01

**Freshwater sediments:** 0.00348 mg/Kg dwt

**RCR:** 0.041

**Sea water:** 0.0000000237 mg/l.

**RCR:** <0.01

**Marine sediment:** 0.0000857 mg/kg dwt

**RCR:** 0.01

**Wastewater treatment plant:** 0.000000809 mg/l

**RCR:** <0.01

**Soil:** 0.000224 mg/kg dwt

**RCR:** 0.013

Based on the applied risk management the risk to the environment is sufficiently controlled, RCR<1

### SECTION 3: Exposure estimation and reference to its source

#### **Exposure assessment (environment): 2**

EUSES v2.1.2

##### **Exposure estimation:**

**Fresh water:** 0.000000946 mg/l

**RCR:** <0.01

**Freshwater sediments:** 0.00348 mg/Kg dwt

**RCR:** 0.041

**Sea water:** 0.0000000237 mg/l.

**RCR:** <0.01

**Marine sediment:** 0.0000857 mg/kg dwt

**RCR:** 0.01

**Wastewater treatment plant:** 0.000000809 mg/l

**RCR:** <0.01

**Soil:** 0.000224 mg/kg dwt

**RCR:** 0.013

Based on the applied risk management the risk to the environment is sufficiently controlled, RCR<1

##### **Exposure assessment (human):**

A qualitative approach was used to conclude that it is safe to use.

### SECTION 4: Indications for the downstream user to assess whether he works within the limits established by ES.

#### **Generals**

The downstream user is required to assess that the operating conditions and risk management measures described in the exposure scenario are suitable for his/her use.

Where other OCs/RMMs are adopted, the user should ensure that risks are managed to at least equivalent levels.

**The risk assessment methods/tools specified in Section 3 can be used for this assessment.**

# Xylene

## Identification of the exposure scenario

Product name: Xylene

Reach registration number: 01-2119488216-32-XXXX

CAS number: 1330-20-7

EC number: 215-535-7

Review date: 14/02/2022 rev. 3.0

## USE IN COATINGS - INDUSTRIAL USE

### 1. Title of the exposure scenario

**Process purpose:** Includes use in coatings (varnishes, inks, adhesives, etc.), including exposure during application (including material receipt, storage, bulk and semi-bulk preparation and transfer, application by spray, roller, manual spraying, dip, flow, fluid layers in production lines and in film formation) and system cleaning, maintenance and related laboratory activities.

**Main sector:** SU3 Industrial uses

#### Environment

**Environmental Release Categories [ERC]:** ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article).

**Specific Environmental Release Category [SPERC]:** ESVOC SPERC 4.3a.v1

#### Worker

##### Process categories:

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions.

PROC 3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment conditions.

PROC4 Production of chemicals with the possibility of exposure.

PROC5 Mixing or blending in batch processes

PROC7 Industrial spraying.

PROC8a Transfer of a substance or preparation (charging/discharging) at non-dedicated facilities.

PROC8a Transfer of substance or mixture (charging/discharging) at non-dedicated facilities.

PROC10 Application with rollers or brushes.

PROC13 Treatment of articles by dipping and pouring.

PROC15 Use as laboratory reagent.

PROC24 High (mechanical) energy work-up of substances bound in/on materials and/or articles.

### 2. Other conditions of use affecting exposure (Industrial - Environment 1)

#### Products features

**Form:** Liquid, vapor pressure 0.5 - 10 kPa at STP

Easily biodegradable.

#### Amounts used:

Annual amount per site: 2500 tonnes

#### Frequency and duration of use

Issue days: 300 days/year

#### Additional operating conditions relating to environmental exposure

##### Emission factor - air

Air release rate produced by the process (initial release prior to risk management measures): 0.98

##### Emission factor - water

Waste water release rate produced by the process (initial release prior to risk management measures): 0.007

##### Emission factor - soil

Soil release rate produced by the process (initial release prior to risk management measures): 0

## ***Environmental factors that are not influenced by risk management***

### **Dilution**

Local fresh water dilution factor: 10

Local seawater dilution factor: 100

### ***Risk management measures***

#### **Sewage Treatment Plant Data (STP)**

Estimated substance removal from waste water via domestic sewage treatment: 95.8%

Assumed domestic sewage treatment plant flow: 2000 m<sup>3</sup>/day

## ***Local technical conditions and measures to reduce and limit discharges and air emissions***

### **Air:**

Treat air emission to provide a typical removal efficiency of > 90%.

### **Water:**

Avoid releasing the undiluted substance into local waste water or recover it on site. The typical on-site purification technique has a removal efficiency of 95.8%.

### **Ground:**

Soil emission controls are not applicable as there is no direct release to soil.

## ***Conditions and measures for external treatment of waste***

### **Sludge treatment:**

Do not spread industrial sludge on natural soils. Sewerage sludge should be burned, stored or regenerated.

### **Waste treatment:**

No waste of the substance is formed during production.

## **2. Other conditions of use affecting exposure (Workers - Health 1)**

### ***Products features***

#### **Form:**

Liquid, vapor pressure 0.5 - 10 kPa at STP

**Concentration information:** Includes concentrations up to 100%, unless otherwise indicated.

### ***Quantities used***

Not applicable.

### ***Frequency and duration of use***

Covers daily exposures up to 8 hours (unless stated differently).

### ***Other operational conditions affecting worker exposure***

**Temperature:** (unless stated differently) assumes use at not more than 20°C above ambient temperature.

**Ventilation Rate:** Ensure a sufficient amount of controlled ventilation (10 to 15 air changes per hour). Assumes a good basic standard of occupational hygiene is implemented.

### ***Technical conditions and process-level (source) measures to prevent releases***

#### **Technical protective measures:**

Handle substance within a closed system. Provide supplementary ventilation to points where emissions occur. Ensure material transfers are managed using closed or air exhaust systems. Drain or remove substance from equipment before opening or servicing PROC7 Industrial spraying: spraying (automatic/robotic) should be carried out in a ventilated booth with laminar air flow.

#### **Risk management measures:**

PROC7 Industrial spraying.

Manual spraying.

Wear respiratory protection in accordance with EN 140 with filter type A or better.

## **3. Verification of exposure (Environment 1)**

### **Environmental exposure:**

Predicted exposures are not expected to exceed the specific risks (listed in chapter 8 of the safety datasheet), when the risk management measures/operational conditions outlined in section 2 are implemented.

Maximum allowable site tonnage (M<sub>safe</sub>), based on release following total waste water treatment removal: 9874 kg/day

### **3. Exposure Verification (Health 1)**

#### **Exposure**

Predicted workplace exposures are not expected to exceed the DNEL when risk identification measures are implemented.

### **4. Guidance to check compliance with the exposure scenario (Environment 1)**

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Guidance is based on assumed operating conditions which may not be applicable to all sites, thus, scaling may be necessary to define appropriate site-specific risk management measures.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for waste water can be achieved using on-site/off-site technologies, either alone or in combination.

Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).

### **4. Guidance to check compliance with the exposure scenario (Health 1)**

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

## USE IN COATINGS - PROFESSIONAL USE

### 1. Title of the exposure scenario

**Process purpose:** Includes use in coatings (varnishes, inks, adhesives, etc.), including exposure during application (including material receipt, storage, bulk and semi-bulk preparation and transfer, application by spray, roller, brush and manual spraying or similar processes and film formation) and system cleaning, maintenance and related laboratory activities.

**Main sector:** SU22 Professional uses

#### **Environment**

##### **Environmental Release Categories [ERC]:**

ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor).

ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor).

ERC8c Widespread use leading to inclusion into/onto article (indoor).

ERC8f Widespread use leading to inclusion into/onto article (outdoor).

Specific Environmental Release Category [SPERC]: ESVOC SPERC 8.3b.v1

#### **Worker**

##### **Process categories:**

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions.

PROC 3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment conditions.

PROC4 Production of chemicals with the possibility of exposure.

PROC5 Mixing or blending in batch processes

PROC8a Transfer of a substance or preparation (charging/discharging) at non-dedicated facilities.

PROC8a Transfer of substance or mixture (charging/discharging) at non-dedicated facilities.

PROC10 Application with rollers or brushes.

PROC11 Non-industrial spray application.

PROC13 Treatment of articles by dipping and pouring.

PROC15 Use as laboratory reagent.

PROC19 Manual activities with direct contact.

PROC24 High (mechanical) energy work-up of substances bound in/on materials and/or articles.

### 2. Other conditions of use affecting exposure (Industrial - Environment 1)

#### **Products features**

**Form:** Liquid, vapor pressure 0.5 - 10 kPa at STP Easily biodegradable.

#### **Quantities used**

Annual amount per site: 10 tonnes

#### **Frequency and duration of use**

Issue days: 365 days/year

#### **Additional operating conditions relating to environmental exposure**

##### **Emission factor - air**

Air release rate produced by the process (initial release prior to risk management measures): 0.98

##### **Emission factor - water**

Waste water release rate produced by the process (initial release prior to risk management measures): 0.01

##### **Emission factor - soil**

Soil release rate produced by the process (initial release prior to risk management measures): 0.01

#### **Environmental factors that are not influenced by risk management**

##### **Dilution**

Local fresh water dilution factor: 10

Local seawater dilution factor: 100

### ***Risk management measures***

Sewage Treatment Plant Data (STP)

Estimated substance removal from waste water via domestic sewage treatment 95.8%

Assumed domestic sewage treatment plant flow: 2000 m<sup>3</sup>/day

### ***Local technical conditions and measures to reduce and limit discharges and air emissions***

Air: Treat air emission to provide a typical removal efficiency of 0%.

Water: The typical on-site purification technique has a removal efficiency of 95.8%.

### ***Conditions and measures for external treatment of waste***

Waste treatment: External treatment and disposal of waste should comply with applicable local and/or national regulations.

## **2. Other conditions of use affecting exposure (Workers - Health 1)**

### ***Products features***

#### **Form:**

Liquid, vapor pressure 0.5 - 10 kPa at STP

#### **Concentration information:**

Includes concentrations up to 100%, unless otherwise indicated.

### ***Quantities used***

Not applicable.

### ***Frequency and duration of use***

Covers daily exposures up to 8 hours (unless stated differently).

### ***Other operational conditions affecting worker exposure***

#### **Temperature:**

(unless stated differently) assumes use at not more than 20°C above ambient temperature.

#### **Ventilation Rate:**

Provide a good standard of controlled ventilation (10 to 15 air changes per hour) or ensure operation is undertaken outdoors.

Assumes a good basic standard of occupational hygiene is implemented.

### ***Technical conditions and process-level (source) measures to prevent releases***

#### **Technical protective measures:**

Handle substance within a closed system. Provide supplementary ventilation to points where emissions occur. Ensure material transfers are managed using closed or air exhaust systems. Clean/flush equipment prior to opening or maintenance. Transport on closed roads. PROC11 Non-industrial spray application. Indoor use. Perform in a laminar flow ventilated booth. PROC15 Use as laboratory reagents handle under fume hood or extract air.

### ***Organizational measures to prevent/limit releases, dispersion and exposure***

#### **Organizational measures**

Avoid activities with an exposure of more than 4 hours.

Hand Application - Finger Paints, Chalks, Stickers:

Limit the amount of substance in the mixture to 5%.

### ***Risk management measures***

Wear protective gloves according to EN 374, resistant to solvents.

PROC10 Application with rollers or brushes.

PROC11 Non-industrial spray application. Outdoor use.

PROC13 Treatment of articles by dipping and pouring. Outdoor use.

Wear respiratory protection in accordance with EN 140 with filter type A or better.

## **3. Verification of exposure (Environment 1)**

### **Environmental exposure**

Predicted exposures are not expected to exceed the specific risks (listed in chapter 8 of the safety datasheet), when the risk management measures/operational conditions outlined in section 2 are implemented.

Maximum allowable site tonnage (M<sub>safe</sub>), based on release following total waste water treatment removal: 5969 kg/day



### **3. Exposure Verification (Health 1)**

#### **Exposure**

Predicted workplace exposures are not expected to exceed the DNEL when risk identification measures are implemented.

### **4. Guidance to check compliance with the exposure scenario (Environment 1)**

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Guidance is based on assumed operating conditions which may not be applicable to all sites, thus, scaling may be necessary to define appropriate site-specific risk management measures.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for waste water can be achieved using on-site/off-site technologies, either alone or in combination.

Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).

### **4. Guidance to check compliance with the exposure scenario (Health 1)**

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

# Hydrocarbons, C9, aromatics

## Substance identification

Chemical Name: Hydrocarbons, C9, aromatics

EC number: 918-668-5

Date - Version: 31/05/2017

## USE IN COATINGS. - INDUSTRIAL USE

### SECTION 1: TITLE

#### List of use descriptors

**Name of identified use:** Use in coatings - Industrial use

**Process categories:** PROC01, PROC02, PROC03, PROC04, PROC05, PROC07, PROC08a, PROC08b, PROC10, PROC13, PROC15

**End use sector:** SU03

**Subsequent service life relevant to that use:** No

**Environmental Release Categories:** ERC04, ESVOC SpERC 4.3a.v1

**Market sector by type of chemical product:** Not applicable.

**Article category in relation to subsequent service life:** Not applicable.

#### Contributing scenarios - Environment

Use in coatings

#### Contributing scenarios - Health

Use in coatings

#### Processes and activities covered by the exposure scenario

It applies to use in coatings (paints, inks, adhesives, etc.) in closed or contained systems, including accidental exposures during use (including receipt, storage, preparation and transfer of materials from containers for bulk and semi-bulk transport, application activities and film formation) and equipment cleaning, maintenance and related laboratory activities

### SECTION 2: EXPOSURE CONTROLS

#### CONTRIBUTING SCENARIO THAT CONTROLS ENVIRONMENTAL EXPOSURE

##### Product features

The substance is a complex UVCB substance. - Mostly hydrophobic.

##### Quantity used

Fraction of EU tonnage used in region 0.1

Regional use tonnage 7600

Fraction of regional tonnage used locally 1

Annual site tonnage 7600

Maximum daily site tonnage 25000

##### Frequency and duration of use

Continuous release - Issue days: 300

##### Environmental factors not influenced by risk management

Local fresh water dilution factor: 10

Local marine water dilution factor: 100

##### Other conditions affecting environmental exposure

Fraction of release to air from process (initial release before RMMs): 0.98

Fraction of release to wastewater from process (initial release before RMMs): 0.0007

Fraction of release to soil from process (initial release before RMMs): 0

##### Process-level conditions and technical measures (source) to prevent release

Common practices vary across sites thus conservative process release estimates are used.

### ***On-site conditions and technical measures to reduce or limit discharges, emissions to air and releases to soil***

Risk from environmental exposure is driven by freshwater sediment.

Prevent discharge of undissolved substance to wastewater, or recover it from wastewater on site. If discharging to municipal sewage treatment plant, no on-site wastewater treatment is required.

Treat air emission to provide a typical removal efficiency of 90%.

Treat wastewater on site (prior to receiving water discharge) to provide the required removal efficiency of  $\geq 77.7\%$ .

If discharged into a domestic sewage treatment plant, ensure the required wastewater removal efficiency of  $\geq 0\%$

### ***Conditions and measures related to sewage treatment plants***

Estimated removal of the substance from wastewater by on-site treatment: 93.6%

Total efficiency of removal from wastewater after on-site and off-site (municipal sewage treatment plant) RMMs: 93.6%

Maximum allowable site tonnage (MSafe) based on release following total removal of wastewater for treatment: 88000

Assumed on-site sewage treatment plant flow: 2000

### ***Conditions and measures related to the external treatment of waste for disposal***

External treatment and disposal of waste should comply with applicable local and/or national regulations.

### ***Conditions and measures related to the external recovery of waste***

External recovery and recycling of waste should comply with applicable local and/or national regulations.

## **CONTRIBUTING SCENARIO CONTROLLING WORKER EXPOSURE**

### ***Concentration of substance in mixture or product***

Applies to a percentage of up to 100% of the substance in the product (unless otherwise specified).

### ***Physical state***

Liquid, vapour pressure 0.5 - 10 kPa at standard temperature and pressure.

### ***Quantity used***

No limit.

### ***Frequency and duration of use***

Applies to daily exposures of up to 8 hours.

### ***Other conditions regarding workers' exposure***

Assumes use at not more than 20°C above ambient temperature, unless otherwise specified. Assumes a good basic standard of occupational hygiene is implemented.

## **CONTRIBUTING SCENARIOS - OPERATING CONDITIONS AND RISK MANAGEMENT MEASURES**

### ***General exposures (closed systems)***

No other specific measures identified.

### ***General exposures (closed systems). With sample collection. Use in contained systems.***

No other specific measures identified.

### ***Film formation - Force drying (50-100 °C). ) Stoving (>100°C). UV/EB radiation curing. Operation is carried out at elevated temperature (> 20°C above ambient temperature).***

Provide extract ventilation in points where emissions occur.

### ***Mixing operations. General exposures (closed systems).***

No other specific measures identified.

### ***Film formation - Air drying.***

Provide extract ventilation in points where emissions occur.

### ***Preparation of material for application. Mixing operations (open systems).***

Provide extract ventilation in points where emissions occur.

### ***Spraying (automatic/robotic).***

Carry out in a vented booth provided with laminar airflow.

### ***Manual spraying.***

Provide enhanced general ventilation by mechanical means. Wear a respirator conforming to EN140 with type A/P2 filter or better.

**Material transfers.**

Provide extract ventilation in points where emissions occur.

**Roller, spreader, flow application.**

Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings.

**Enamelling, dipping and pouring.**

Provide extract ventilation in points where emissions occur.

**Laboratory activities.**

No other specific measures identified.

**Material transfers. Transfers in drums/batch. Transfer/pouring from containers.**

Provide material transfer points with extract ventilation.

**Material transfers. Transfers in drums/batch. Transfer/pouring from containers.**

Wear a respirator conforming to EN140 with type A/P2 filter or better.

**Production of preparations or articles by tableting, compression, extrusion or pelletising.**

Provide enhanced general ventilation by mechanical means.

## SECTION 3: EXPOSURE ESTIMATION AND REFERENCE TO ITS SOURCE

### EXPOSURE ESTIMATION AND REFERENCE TO ITS SOURCE - ENVIRONMENT

**Exposure assessment (environment)**

Not available.

**Exposure estimation and reference to its source**

Hydrocarbon Block Method (Petrisk)

### EXPOSURE ESTIMATION AND REFERENCE TO ITS SOURCE - WORKERS

**Exposure assessment (human)**

Not available.

**Exposure estimation and reference to its source**

Unless otherwise specified, the ECETOC TRA tool was used to estimate workplace exposures.

## SECTION 4: GUIDANCE FOR THE DOWNSTREAM USER (DU) TO ASSESS WHETHER HE/SHE IS OPERATING WITHIN THE LIMITS ESTABLISHED BY THE EXPOSURE SCENARIO

**ENVIRONMENT**

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures. Required removal efficiency for wastewater can be achieved using on-site/off-site technologies, either alone or in combination. Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination. Further details on scaling and control technologies are provided in SPERC factsheet.

**HEALTH**

Predicted exposures are not expected to exceed the DN(M)EL when the risk management measures/operational conditions outlined in Section 2 are implemented. Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

**Additional indication of good practices in addition to the chemical safety assessment**

**Environment:** Not available

**Health:** Not available

## USE IN COATINGS. - PROFESSIONAL USE

### SECTION 1: TITLE

#### **List of use descriptors**

**Name of identified use:** Use in coatings - Professional use.

**Process categories:** PROC01, PROC02, PROC03, PROC04, PROC05, PROC05, PROC08a, PROC08b, PROC10, PROC11, PROC13, PROC15, PROC19

**End use sector:** SU22

**Subsequent service life relevant to that use:** No

**Environmental Release Categories:** ERC08a, ERC08d, ESVOC SpERC 8.3b.v1

**Market sector by type of chemical product:** Not applicable.

**Article category in relation to subsequent service life:** Not applicable.

#### **Contributing scenarios - Environment**

Use in coatings

#### **Contributing scenarios - Health**

Use in coatings

#### **Processes and activities covered by the exposure scenario**

It applies to use in coatings (paints, inks, adhesives, etc.), including exposures during use (including the receipt, storage, preparation and transfer of materials from containers for bulk and semi-bulk transport, manual application by spraying, roller, brush, spreader or similar methods and film formation) and equipment cleaning, maintenance and related laboratory activities.

### SECTION 2: EXPOSURE CONTROLS

#### CONTRIBUTING SCENARIO THAT CONTROLS ENVIRONMENTAL EXPOSURE

##### **Product features**

The substance is a complex UVCB substance. - Mostly hydrophobic.

##### **Quantity used**

Fraction of EU tonnage used in region 0.1

Regional use tonnage 2200

Fraction of regional tonnage used locally 1

Annual site tonnage 1.1

Maximum daily site tonnage 3

##### **Frequency and duration of use**

Continuous release - Issue days: 365

##### **Environmental factors not influenced by risk management**

Local fresh water dilution factor: 10

Local marine water dilution factor: 100

##### **Other conditions affecting environmental exposure**

Fraction of release to air from process (initial release before RMMs): 0.98

Fraction of release to wastewater from process (initial release before RMMs): 0.01

Fraction of release to soil from process (initial release before RMMs): 0.01

##### **Process-level conditions and technical measures (source) to prevent release**

Common practices vary across sites thus conservative process release estimates are used.

##### **On-site conditions and technical measures to reduce or limit discharges, emissions to air and releases to soil**

Risk from environmental exposure is driven by soil.

Wastewater treatment is not required.

Treat emissions to air to ensure a typical removal efficiency: N/A.

Treat wastewater on site (prior to receiving water discharge) to provide the required removal efficiency of  $\geq 0\%$ .

If discharged into a domestic sewage treatment plant, ensure the required wastewater removal efficiency of  $\geq 0\%$

##### **Organizational measures to prevent/limit release from a site**

Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed.

### **Conditions and measures related to sewage treatment plants**

Estimated removal of the substance from wastewater by on-site treatment: 93.6%

Total efficiency of removal from wastewater after on-site and off-site (municipal sewage treatment plant) RMMs: 93.6%

Maximum allowable site tonnage (MSafe) based on release following total removal of wastewater for treatment: 3300

Assumed on-site sewage treatment plant flow: 2000

### **Conditions and measures related to the external treatment of waste for disposal**

External treatment and disposal of waste should comply with applicable local and/or national regulations.

### **Conditions and measures related to the external recovery of waste**

External recovery and recycling of waste should comply with applicable local and/or national regulations.

## **CONTRIBUTING SCENARIO CONTROLLING WORKER EXPOSURE**

### **Concentration of substance in mixture or product**

Applies to a percentage of up to 100% of the substance in the product (unless otherwise specified).

### **Physical state**

Liquid, vapour pressure 0.5 - 10 kPa at standard temperature and pressure.

### **Quantity used**

No limit.

### **Frequency and duration of use**

Applies to daily exposures of up to 8 hours.

### **Other conditions regarding workers' exposure**

Assumes use at not more than 20°C above ambient temperature, unless otherwise specified. Assumes a good basic standard of occupational hygiene is implemented.

## **CONTRIBUTING SCENARIOS - OPERATING CONDITIONS AND RISK MANAGEMENT MEASURES**

### **General exposures (closed systems)**

No other specific measures identified.

### **General exposures (closed systems).**

No other specific measures identified.

### **Filling/preparation of equipment from drums or containers.**

Ensure material transfers are under containment or extract ventilation.

### **General exposures (closed systems). Use in contained systems.**

No other specific measures identified.

### **Preparation of material for application.**

Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings.

### **Film formation - Air drying. Outside.**

Ensure operation is undertaken outdoors. Avoid carrying out operation for more than 1 hour.

### **Film formation - Air drying. Inside.**

Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Avoid carrying out operation for more than 1 hour.

### **Preparation of material for application. Inside.**

Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Avoid carrying out operation for more than 15 minutes.

### **Preparation of material for application. Outside.**

Ensure operation is undertaken outdoors. Avoid carrying out operation for more than 15 minutes.

### **Material transfers. Transfers in drums/batch. Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities.**

Provide enhanced general ventilation by mechanical means. Avoid carrying out operation for more than 1 hour.

### **Material transfers. Transfers in drums/batch. Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities.**

***Roller, spreader, flow application. Inside.***

Provide enhanced general ventilation by mechanical means. Avoid carrying out operation for more than 1 hour.

***Roller, spreader, flow application. Outside.***

Ensure operation is undertaken outdoors. Avoid carrying out operation for more than 15 minutes.

***Manual spraying. Inside.***

Carry out in a vented booth or extracted enclosure. Limit the substance content in the product to 25%. Avoid carrying out operation for more than 15 minutes.

***Manual spraying. Outside.***

Ensure operation is undertaken outdoors. Limit the substance content in the product to 5%. Avoid carrying out operation for more than 15 minutes.

***Manual spraying. Outside.***

Ensure operation is undertaken outdoors. Limit the substance content in the product to 25%. Avoid carrying out operation for more than 1 hour. Wear a respirator conforming to EN140 with type A/P2 filter or better.

***Enamelling, dipping and pouring. Inside.***

Provide extract ventilation in points where emissions occur. Avoid carrying out operation for more than 1 hour.

***Enamelling, dipping and pouring. Outside.***

Ensure operation is undertaken outdoors. Avoid carrying out operation for more than 15 minutes.

***Laboratory activities.***

Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan.

***Hand application - fingerpaints, pastels, adhesives. Outside.***

Ensure doors and windows are opened. Limit the substance content in the product to 25%. Avoid carrying out operation for more than 1 hour.

***Hand application - fingerpaints, pastels, adhesives. Inside.***

Ensure operation is undertaken outdoors. Limit the substance content in the product to 25%. Avoid carrying out operation for more than 15 minutes.

## **SECTION 3: EXPOSURE ESTIMATION AND REFERENCE TO ITS SOURCE**

### **EXPOSURE ESTIMATION AND REFERENCE TO ITS SOURCE - ENVIRONMENT**

***Exposure assessment (environment)***

Not available.

***Exposure estimation and reference to its source***

Hydrocarbon Block Method (Petrisk)

### **EXPOSURE ESTIMATION AND REFERENCE TO ITS SOURCE - WORKERS**

***Exposure assessment (human)***

Not available.

***Exposure estimation and reference to its source***

Unless otherwise specified, the ECETOC TRA tool was used to estimate workplace exposures.

## **SECTION 4: GUIDANCE FOR THE DOWNSTREAM USER (DU) TO ASSESS WHETHER HE/SHE IS OPERATING WITHIN THE LIMITS ESTABLISHED BY THE EXPOSURE SCENARIO**

### ***ENVIRONMENT***

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures. Required removal efficiency for wastewater can be achieved using on-site/off-site technologies, either alone or in combination. Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination. Further details on scaling and control technologies are provided in SPERC factsheet.

### ***HEALTH***

Predicted exposures are not expected to exceed the DN(M)EL when the risk management measures/operational conditions outlined in Section 2 are implemented. Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

### ***Additional indication of good practices in addition to the chemical safety assessment***

**Environment:** Not available

**Health:** Not available



## USE IN ROAD AND CONSTRUCTION PRODUCTS. - PROFESSIONAL USE

### SECTION 1: TITLE

#### **List of use descriptors**

**Name of identified use:** Use in road and construction products - Professional use.

**Process categories:** PROC08a, PROC08b, PROC09, PROC10, PROC11, PROC13

**End use sector:** SU22

**Subsequent service life relevant to that use:** No

**Environmental Release Categories:** ERC08d, ERC08f, ESVOC SpERC 8.15.v1

**Market sector by type of chemical product:** Not applicable.

**Article category in relation to subsequent service life:** Not applicable.

#### **Contributing scenarios - Environment**

Use in road and construction products

#### **Contributing scenarios - Health**

Use in road and construction products

#### **Processes and activities covered by the exposure scenario**

Application of surface coatings and binders in road and construction activities, including paving uses, manual mastic and in the application of roofing and water-proofing membranes.

### SECTION 2: EXPOSURE CONTROLS

#### CONTRIBUTING SCENARIO THAT CONTROLS ENVIRONMENTAL EXPOSURE

##### **Product features**

The substance is a complex UVCB substance. - Mostly hydrophobic.

##### **Quantity used**

Fraction of EU tonnage used in region 0.1

Regional use tonnage 22

Fraction of regional tonnage used locally 0.0005

Annual site tonnage 0.011

Maximum daily site tonnage 0.03

##### **Frequency and duration of use**

Continuous release - Issue days: 365

##### **Environmental factors not influenced by risk management**

Local fresh water dilution factor: 10

Local marine water dilution factor: 100

##### **Other conditions affecting environmental exposure**

Fraction of release to air from process (initial release before RMMs): 0.95

Fraction of release to wastewater from process (initial release before RMMs): 0.01

Fraction of release to soil from process (initial release before RMMs): 0.04

##### **Process-level conditions and technical measures (source) to prevent release**

Common practices vary across sites thus conservative process release estimates are used.

##### **On-site conditions and technical measures to reduce or limit discharges, emissions to air and releases to soil**

Risk from environmental exposure is driven by soil.

Wastewater treatment is not required.

Treat emissions to air to ensure a typical removal efficiency: N/A.

Treat wastewater on site (prior to receiving water discharge) to provide the required removal efficiency of  $\geq 0\%$ .

If discharged into a domestic sewage treatment plant, ensure the required wastewater removal efficiency of  $\geq 0\%$

##### **Organizational measures to prevent/limit release from a site**

Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed.

### **Conditions and measures related to sewage treatment plants**

Estimated removal of the substance from wastewater by on-site treatment: 93.6%

Total efficiency of removal from wastewater after on-site and off-site (municipal sewage treatment plant) RMMs: 93.6%

Maximum allowable site tonnage (MSafe) based on release following total removal of wastewater for treatment: 61

Assumed on-site sewage treatment plant flow: 2000

### **Conditions and measures related to the external treatment of waste for disposal**

External treatment and disposal of waste should comply with applicable local and/or national regulations.

### **Conditions and measures related to the external recovery of waste**

External recovery and recycling of waste should comply with applicable local and/or national regulations.

## **CONTRIBUTING SCENARIO CONTROLLING WORKER EXPOSURE**

### **Concentration of substance in mixture or product**

Applies to a percentage of up to 100% of the substance in the product (unless otherwise specified).

### **Physical state**

Liquid, vapour pressure 0.5 - 10 kPa at standard temperature and pressure.

### **Quantity used**

No limit.

### **Frequency and duration of use**

Applies to daily exposures of up to 8 hours.

### **Other conditions regarding workers' exposure**

Assumes use at not more than 20°C above ambient temperature, unless otherwise specified. Assumes a good basic standard of occupational hygiene is implemented.

## **CONTRIBUTING SCENARIOS - OPERATING CONDITIONS AND RISK MANAGEMENT MEASURES**

### **Transfers in drums/batch. Non-dedicated structure**

Ensure operation is undertaken outdoors. Avoid carrying out operation for more than 15 minutes.

### **Transfers in drums/batch. Special dedicated structure**

Ensure operation is undertaken outdoors. Avoid carrying out operation for more than 1 hour.

### **Spraying/fogging by machine application. Operation is carried out at elevated temperature (> 20°C above ambient temperature).**

Ensure operation is undertaken outdoors. Limit the substance content in the product to 5%. Wear a respirator conforming to EN140 with type A/P2 filter or better. Automate activity where possible. Ensure operatives are trained to minimise exposures. Stay upwind/keep distance from source.

### **Manual applications, e.g. brush, roller.**

Ensure operation is undertaken outdoors. Limit the substance content in the product to 5%.

### **Transfers in drums/batch. Special dedicated structure. Operation is carried out at elevated temperature (> 20°C above ambient temperature).**

Ensure operation is undertaken outdoors. Avoid carrying out operation for more than 1 hour.

### **Spraying/fogging by machine application.**

Ensure operation is undertaken outdoors. Avoid carrying out operation for more than 4 hours. Wear a respirator conforming to EN140 with type A/P2 filter or better. Wear chemically resistant gloves (tested to EN374) and provide specific employee training.

### **Enamelling, dipping and pouring.**

Ensure operation is undertaken outdoors. Wear a respirator conforming to EN140 with type A/P2 filter or better.

### **Cleaning and maintenance of equipment**

Ensure operation is undertaken outdoors. Store drainage liquids in sealed containers pending disposal or for subsequent recycling. Drain system before equipment downtime or maintenance.

## SECTION 3: EXPOSURE ESTIMATION AND REFERENCE TO ITS SOURCE

### EXPOSURE ESTIMATION AND REFERENCE TO ITS SOURCE - ENVIRONMENT

#### *Exposure assessment (environment)*

Not available.

#### *Exposure estimation and reference to its source*

Hydrocarbon Block Method (Petrisk)

### EXPOSURE ESTIMATION AND REFERENCE TO ITS SOURCE - WORKERS

#### *Exposure assessment (human)*

Not available.

#### *Exposure estimation and reference to its source*

Unless otherwise specified, the ECETOC TRA tool was used to estimate workplace exposures.

## SECTION 4: GUIDANCE FOR THE DOWNSTREAM USER (DU) TO ASSESS WHETHER HE/SHE IS OPERATING WITHIN THE LIMITS ESTABLISHED BY THE EXPOSURE SCENARIO

### **ENVIRONMENT**

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures. Required removal efficiency for wastewater can be achieved using on-site/off-site technologies, either alone or in combination. Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination. Further details on scaling and control technologies are provided in SPERC factsheet.

### **HEALTH**

Predicted exposures are not expected to exceed the DN(M)EL when the risk management measures/operational conditions outlined in Section 2 are implemented. Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

#### *Additional indication of good practices in addition to the chemical safety assessment*

**Environment:** Not available

**Health:** Not available

## 2-methoxy-1-methylethyl acetate

### Substance identification

Chemical Name: 2-methoxy-1-methylethyl acetate

CAS number: 108-65-6

Date - Version: 02/08/2021 18.0

## 4. USE IN COATINGS. - USE IN INDUSTRIAL PLANTS

**Short title of the exposure scenario:** Use in coatings. - Use in industrial plants

SU3; ERC4; PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15

## EXPOSURE CONTROL AND RISK MANAGEMENT MEASURES

### EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: ERC4: Industrial use of processing aids not becoming part of articles.

#### Operating conditions

Yearly amount used in EU: 63,050,000 kg

Daily amount per site: 105.087 kg

Minimum continuous emission days per year: 300

Emission factor to air: 27%

Emission factor in water: 2%

Emission factor in soil: 0.1%

Releases based on A&B tables from TGD 2003

Freshwater dilution factor: 10

Marine water dilution factor: 100

#### Risk management measures

Treat air emissions to provide a typical removal efficiency of 70%.

Prevent discharge of undissolved substance, or recover from wastewater.

Type of treatment plant: Municipal sewage treatment plant.

Total removal efficiency of the substance from the wastewater after Risk Management Measures and treatment in the treatment plant (5): 87.3%

Assumed treatment plant flow: 2,000 m<sup>3</sup>/day

#### Measures relative to the waste

Dispose of waste cans and containers according to local regulations.

#### Exposure estimation and reference to its source

Risk Characterization Ratio (RCR): 0.1338

Risk from environmental exposure is driven by freshwater and marine water.

Maximum safe use amount: 79,180 kg/day

### EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC1: Use in closed process, no likelihood of exposure.

Area of use: Industrial

#### Operating conditions

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤100%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 0.04 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.0001

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 0.34 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.01

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC2: Use in closed, continuous process with occasional controlled exposure.  
**General exposure.** Continuous process (closed system) with sample collection.

**Area of use:** Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤100%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 37.54 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.1

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 1.37 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.03

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC2: Use in closed, continuous process with occasional controlled exposure.  
**Film formation - Fast drying.**

**Area of use:** Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤100%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Operation is carried out at elevated temperature (> 20°C above ambient temperature).

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 187.71 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.5

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 1.37 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.03

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC3: Use in batch process (synthesis or formulation). Mixing operations. General exposure (closed system).

**Area of use:** Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 93.85 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.25

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 0.34 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.01

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC4: Use in batch process (synthesis) where opportunity for exposure arises. Film formation - Air drying.

**Area of use:** Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 75.08 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.2

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 6.86 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.14

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC5: Mixing in batch processes for formulation of preparations and articles (multistage and/or significant contact). Preparation of material for application. Mixing operations (open systems).

**Area of use:** Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 187.71 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.51

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 13.71 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors: PROC7: Industrial spray application. Spraying (automatic/robotic).**

**Area of use: Industrial**

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤100%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Carry out in a vented booth or extracted enclosure. Effectiveness: 95%.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 46.93 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.13

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 2.14 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.04

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors: PROC7: Industrial spray application. Spraying (manual).**

**Area of use: Industrial**

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤100%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Effectiveness: 70%.

Wear suitable gloves compliant with EN ISO 374-1. Effectiveness: 80%.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 281.56 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.76

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 8.57 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.17

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>



## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities. Material transfers. Non-dedicated system.

**Area of use:** Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 187.71 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.51

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 13.71 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities. Material transfers. Dedicated plant.

**Area of use:** Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 187.71 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.51

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 6.86 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.14

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Material transfers. Drum/batch transfers. Transfer from containers. Dedicated plant.

**Area of use:** Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.



### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 187.71 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.51

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 6.86 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.14

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors: PROC10: Application with rollers or brushes. Roller, spatula, jet application.**

**Area of use: Industrial**

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤100%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Wear suitable gloves compliant with EN ISO 374-1. Effectiveness: 80%

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 187.71 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.51

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 5.49 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.11

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors: PROC13: Treatment of articles by dipping, pouring, enamelling.**

**Area of use: Industrial**

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤100%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 187.71 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.51

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 13.71 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC14: Production of preparations or articles by tableting, compression, extrusion or pelletising. Production or preparation of articles by tableting, compression, extrusion.

Area of use: Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 187.71 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.51

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 3.43 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.07

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC15: Use as laboratory reagent. Laboratory activities.

Area of use: Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 37.54 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.1

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 0.34 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.01

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## 5. USE IN COATINGS. - USE IN INDUSTRIAL PLANTS

**Short title of the exposure scenario:** Use in coatings. - Use in industrial plants

SU3; ERC4; PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15

### EXPOSURE CONTROL AND RISK MANAGEMENT MEASURES

#### EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** ERC4: Industrial use of processing aids not becoming part of articles.

##### *Operating conditions*

Yearly amount used in EU: 2,600,000 kgs

Daily amount per site: 430kg

Minimum continuous emission days per year: 300

Emission factor to air: 80%

Emission factor in water: 10%

Emission factor in soil: 0.1%

Releases based on A&B tables from TGD 2003

Freshwater dilution factor: 10

Marine water dilution factor: 100

##### *Risk management measures*

Prevent discharge of undissolved substance, or recover from wastewater.

Type of treatment plant: Municipal sewage treatment plant.

Total removal efficiency of the substance from the wastewater after Risk Management Measures and treatment in the treatment plant (5): 87.3%

Assumed treatment plant flow: 2,000 m<sup>3</sup>/day

##### *Measures relative to the waste*

Dispose of waste cans and containers according to local regulations.

##### *Exposure estimation and reference to its source*

Risk Characterization Ratio (RCR): 0.029

Risk from environmental exposure is driven by freshwater and marine water.

Maximum safe use amount: 140.104 kg/day

#### EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC1: Use in closed process, no likelihood of exposure (closed system). General exposure.

**Area of use:** Industrial

##### *Operating conditions*

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤5%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

##### *Exposure estimation and reference to its source*

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure.

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

##### *Guidance for downstream users*

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

#### EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC2: Use in closed, continuous process with occasional controlled exposure. General exposure. Continuous process (closed system) with sample collection.

**Area of use:** Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 7.51 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.02

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 1.37 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.03

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC2: Use in closed, continuous process with occasional controlled exposure. Film formation - Fast drying.

**Area of use:** Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Operation is carried out at elevated temperature ( $> 20^\circ\text{C}$  above ambient temperature).

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 37.54 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.1

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 1.37 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.03

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC3: Use in batch process (synthesis or formulation). Mixing operations. General exposure (closed system).

**Area of use:** Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 18.77 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.05

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 0.34 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.01

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC4: Use in batch process (synthesis) where opportunity for exposure arises. Film formation - Air drying.

Area of use: Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 15.02 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.04

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 6.86 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.14

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC5: Mixing in batch processes for formulation of preparations and articles (multistage and/or significant contact). Preparation of material for application. Mixing operations (open systems).

Area of use: Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 37.54 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.1

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 13.71 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC7: Industrial spray application. Spraying (automatic/robotic). Spraying (manual)

Area of use: Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Wear suitable gloves compliant with EN ISO 374-1. Effectiveness: 80%.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 187.71 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.51

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 8.57 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.17

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors: PROC7: Industrial spray application. Spraying (manual).**

**Area of use: Industrial**

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤5%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Wear suitable gloves compliant with EN ISO 374-1.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors: PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities. Material transfers. Non-dedicated system.**

**Area of use: Industrial**

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤5%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 37.54 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.1

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 13.71 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors: PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities. Material transfers. Dedicated plant.**

**Area of use: Industrial**

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 37.54 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.1

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 6.86 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.14

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Material transfers. Drum/batch transfers. Transfer from containers. Dedicated plant.

**Area of use:** Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 37.54 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.1

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 6.86 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.14

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC10: Application with rollers or brushes. Roller, spatula, jet application.

**Area of use:** Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 37.54 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.1

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 27.43 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.54

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>



## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC13: Treatment of articles by dipping, pouring, enamelling.

Area of use: Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 37.54 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.1

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 13.71 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC14: Production of preparations or articles by tableting, compression, extrusion or pelletising. Production or preparation of articles by tableting, compression, extrusion.

Area of use: Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 37.54 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.1

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 3.43 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.07

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC15: Use as laboratory reagent. Laboratory activities.

Area of use: Industrial

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.



**Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 7.51 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.02

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 0.34 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.01

**Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## 7 USE IN COATINGS. - USE IN INDUSTRIAL PLANTS

**Short title of the exposure scenario:** Use in coatings. - Use in professional installations

SU22; ERC8a, ERC8d; PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC15, PROC19

### EXPOSURE CONTROL AND RISK MANAGEMENT MEASURES

#### EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** ERC8a: Wide dispersive indoor use of processing aids in open systems.

##### *Operating conditions*

Yearly amount used in EU: 2,600,000 kgs

Daily amount per site: 433 kg

Minimum continuous emission days per year: 300

Emission factor to air: 80%

Emission factor in water: 10%

Emission factor in soil: 0.1%

Releases based on A&B tables from TGD 2003

Freshwater dilution factor: 10

Marine water dilution factor: 100

##### *Risk management measures*

Prevent discharge of undissolved substance, or recover from wastewater.

Type of treatment plant: Municipal sewage treatment plant.

Total removal efficiency of the substance from the wastewater after Risk Management Measures and treatment in the treatment plant (5): 87.3%

Assumed treatment plant flow: 2,000 m<sup>3</sup>/day

##### *Measures relative to the waste*

Dispose of waste cans and containers according to local regulations.

##### *Exposure estimation and reference to its source*

Risk Characterization Ratio (RCR): 0.029

Risk from environmental exposure is driven by freshwater and marine water.

Maximum safe use amount: 15,141 kg/day

#### EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** ERC8d: Wide dispersive outdoor use of processing aids in open systems.

##### *Operating conditions*

Yearly amount used in EU: 2,600,000 kgs

Daily amount per site: 433 kg

Minimum continuous emission days per year: 300

Emission factor to air: 80%

Emission factor in water: 10%

Emission factor in soil: 0.1%

Releases based on A&B tables from TGD 2003

Freshwater dilution factor: 10

Marine water dilution factor: 100

##### *Risk management measures*

Prevent discharge of undissolved substance, or recover from wastewater.

Type of treatment plant: Municipal sewage treatment plant.

Total removal efficiency of the substance from the wastewater after Risk Management Measures and treatment in the treatment plant (5): 87.3%

Assumed treatment plant flow: 2,000 m<sup>3</sup>/day

### **Measures relative to the waste**

Dispose of waste cans and containers according to local regulations.

### **Exposure estimation and reference to its source**

Risk Characterization Ratio (RCR): 0.029

Risk from environmental exposure is driven by freshwater and marine water.

Maximum safe use amount: 15,141 kg/day

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC1: Use in closed process, no likelihood of exposure.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 0.04 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.0001

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 0.34 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.01

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC2: Use in closed, continuous process with occasional controlled exposure.

**Filling/Preparation of equipment required for drums and containers.**

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure.

The use has been assessed as safe.

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC2: Use in closed, continuous process with occasional controlled exposure.

**General exposure. Use in confined systems (closed system). Filling/Preparation of equipment required for drums and containers.**

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Operation is carried out at elevated temperature ( $> 20^\circ\text{C}$  above ambient temperature).

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 75.08 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.2

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 1.37 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.03

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC3: Use in batch process (synthesis or formulation). Preparation of material for application

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤100%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 93.85 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.25

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 0.34 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.01

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC4: Use in batch process (synthesis) where opportunity for exposure arises. Film formation - Air drying.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤100%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 187.71 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.51

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 6.86 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.14

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC4: Use in batch and other processes (synthesis) where opportunity for exposure arises. Film formation - Air drying.

Area of use: Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure.

The use has been assessed as safe.

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC5: Mixing in batch processes for formulation of preparations and articles (multistage and/or significant contact). Preparation of material for application.

Area of use: Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Effectiveness: 30%.

Alternatively: Ensure that operations are carried out externally.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 269.79 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.71

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 13.71 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC5: Mixing in batch processes for formulation of preparations and articles (multistage and/or significant contact). Preparation of material for application.

Area of use: Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### ***Risk management measures***

Ensure that operations are carried out externally.

### ***Exposure estimation and reference to its source***

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### ***Guidance for downstream users***

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors: PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities. Material transfers. Drum/batch transfers. Non-dedicated system.**

**Area of use: Professional**

### ***Operating conditions***

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### ***Risk management measures***

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Effectiveness: 30%.

### ***Exposure estimation and reference to its source***

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 262.79 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.71

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 13.71 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.27

### ***Guidance for downstream users***

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors: PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities. Material transfers. Drum/batch transfers Dedicated plant.**

**Area of use: Professional**

### ***Operating conditions***

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### ***Exposure estimation and reference to its source***

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 187.71 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.51

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 6.86 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.14

### ***Guidance for downstream users***

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC10: Application with rollers or brushes. Roller, spatula, jet application.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Effectiveness: 30%.

Wear suitable gloves compliant with EN ISO 374-1. Effectiveness: 80%

If there is no general ventilation, ensure that operations are carried out outdoors.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 262.79 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.71

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 5.49 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.11

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC10: Application with rollers or brushes. Roller, spatula, jet application.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Ensure that operations are carried out externally.

Wear suitable gloves compliant with EN ISO 374-1.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC11: Non-industrial spray application. Spraying (manual).

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Carry out in a vented booth or extracted enclosure. Effectiveness: 80%.

Wear a respirator conforming to EN140 with type A filter or better. Effectiveness: 90%.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 37.54 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.1

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 2.14 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.04

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors: PROC11: Non-industrial spray application. Spraying (manual).**

**Area of use: Professional**

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤100%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Ensure that operations are carried out externally. Effectiveness: 30%.

Wear a respirator conforming to EN140 with type A filter or better. Effectiveness: 90%.

Wear suitable gloves compliant with EN ISO 374-1. Effectiveness: 80%.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 131.4 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.36

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 21.43 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.42

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors: PROC13: Treatment of articles by dipping, pouring, enamelling.**

**Area of use: Professional**

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤100%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Effectiveness: 30%.

Alternatively: Ensure that operations are carried out externally.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 262.79 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.71

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 13.71 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>



## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC13: Treatment of articles by dipping, pouring, enamelling.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Ensure that operations are carried out externally.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC15: Use as laboratory reagent. Laboratory activities.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 37.54 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.1

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 0.34 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.01

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC19: Manual mixing with direct contact using only personal protective equipment. Hand application - fingerpaints, pastels, adhesives.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 100\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Effectiveness: 30%.

Wear chemically resistant gloves in combination with "basic" employee training. Effectiveness: 90%.

If there is no general ventilation, ensure that operations are carried out outdoors.

### ***Exposure estimation and reference to its source***

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 262.79 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.71

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 14.14 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.28

### ***Guidance for downstream users***

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC19: Manual mixing with direct contact using only personal protective equipment. Hand application - fingerpaints, pastels, adhesives.

**Area of use:** Professional

### ***Operating conditions***

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤100%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### ***Risk management measures***

Ensure that operations are carried out externally.

Wear chemically resistant gloves in combination with "basic" employee training.

### ***Exposure estimation and reference to its source***

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### ***Guidance for downstream users***

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## 8. USE IN COATINGS. - USE IN INDUSTRIAL PLANTS

**Short title of the exposure scenario:** Use in coatings. - Use in professional installations

SU22; ERC8a, ERC8d; PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC15, PROC19

### EXPOSURE CONTROL AND RISK MANAGEMENT MEASURES

#### EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** ERC8a: Wide dispersive indoor use of processing aids in open systems.

##### *Operating conditions*

Yearly amount used in EU: 2,600,000 kgs

Daily amount per site: 433 kg

Minimum continuous emission days per year: 300

Emission factor to air: 80%

Emission factor in water: 10%

Emission factor in soil: 0.1%

Releases based on A&B tables from TGD 2003

Freshwater dilution factor: 10

Marine water dilution factor: 100

##### *Risk management measures*

Prevent discharge of undissolved substance, or recover from wastewater.

Type of treatment plant: Municipal sewage treatment plant.

Total removal efficiency of the substance from the wastewater after Risk Management Measures and treatment in the treatment plant (5): 87.3%

Assumed treatment plant flow: 2,000 m<sup>3</sup>/day

##### *Measures relative to the waste*

Dispose of waste cans and containers according to local regulations.

##### *Exposure estimation and reference to its source*

Risk Characterization Ratio (RCR): 0.029

Risk from environmental exposure is driven by freshwater and marine water.

Maximum safe use amount: 15,141 kg/day

#### EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** ERC8d: Wide dispersive outdoor use of processing aids in open systems.

##### *Operating conditions*

Yearly amount used in EU: 2,600,000 kgs

Daily amount per site: 433 kg

Minimum continuous emission days per year: 300

Emission factor to air: 80%

Emission factor in water: 10%

Emission factor in soil: 0.1%

Releases based on A&B tables from TGD 2003

Freshwater dilution factor: 10

Marine water dilution factor: 100

##### *Risk management measures*

Prevent discharge of undissolved substance, or recover from wastewater.

Type of treatment plant: Municipal sewage treatment plant.

Total removal efficiency of the substance from the wastewater after Risk Management Measures and treatment in the treatment plant (5): 87.3%

Assumed treatment plant flow: 2,000 m<sup>3</sup>/day

### **Measures relative to the waste**

Dispose of waste cans and containers according to local regulations.

### **Exposure estimation and reference to its source**

Risk Characterization Ratio (RCR): 0.029

Risk from environmental exposure is driven by freshwater and marine water.

Maximum safe use amount: 15,141 kg/day

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC1: Use in closed process, no likelihood of exposure. General exposure (closed system).

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC2: Use in closed, continuous process with occasional controlled exposure. Filling/Preparation of equipment required for drums and containers.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC2: Use in closed, continuous process with occasional controlled exposure. General exposure. Use in confined systems (closed system). Filling/Preparation of equipment required for drums and containers.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Operation is carried out at elevated temperature ( $> 20^\circ\text{C}$  above ambient temperature).

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 15.02 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.4

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 1.37 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.03

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC3: Use in batch process (synthesis or formulation). Preparation of material for application

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤5%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 18.77 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.05

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 0.34 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.01

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC4: Use in batch and other processes (synthesis) where opportunity for exposure arises. Film formation - Air drying.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤5%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 37.54 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.1

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 6.86 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.14

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC4: Use in batch and other processes (synthesis) where opportunity for exposure arises. Film formation - Air drying.

Area of use: Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Indoor/Outdoor: Indoor use.

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC5: Mixing in batch processes for formulation of preparations and articles (multistage and/or significant contact). Preparation of material for application.

Area of use: Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 75.08 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.2

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 13.71 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC5: Mixing in batch processes for formulation of preparations and articles (multistage and/or significant contact). Preparation of material for application.

Area of use: Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Ensure that operations are carried out externally.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities. Material transfers. Drum/batch transfers. Non-dedicated system.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 75.08 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.2

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 13.71 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities. Material transfers. Drum/batch transfers Dedicated plant.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 37.54 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.1

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 6.86 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.14

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC10: Application with rollers or brushes. Roller, spatula, jet application.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.



### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 75.08 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.2

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 27.43 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.54

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors: PROC10: Application with rollers or brushes. Roller, spatula, jet application.**

**Area of use: Professional**

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤5%

Indoor/Outdoor: Outdoor use.

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors: PROC11: Non-industrial spray application. Spraying (manual).**

**Area of use: Professional**

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤5%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Effectiveness: 30%.

Wear chemically resistant gloves in combination with "basic" employee training. Effectiveness: 90%.

If there is no general ventilation, ensure that operations are carried out outdoors.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 262.79 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.71

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 10.71 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.21

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>



## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC11: Non-industrial spray application. Spraying (manual).

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Ensure that operations are carried out externally.

Wear chemically resistant gloves in combination with "basic" employee training.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC13: Treatment of articles by dipping, pouring, enamelling.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 75.08 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.2

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 13.71 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC13: Treatment of articles by dipping, pouring, enamelling.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Indoor/Outdoor: Indoor use.

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Ensure that operations are carried out externally.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC15: Use as laboratory reagent. Laboratory activities.

Area of use: Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 7.51 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.02

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 0.34 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.01

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC19: Manual mixing with direct contact using only personal protective equipment. Hand application - fingerpaints, pastels, adhesives.

Area of use: Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Wear suitable gloves compliant with EN ISO 374-1. Effectiveness: 80%.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 75.08 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.2

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 28.29 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.56

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC19: Manual mixing with direct contact using only personal protective equipment. Hand application - fingerpaints, pastels, adhesives.

Area of use: Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Indoor/Outdoor: Outdoor use.

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Wear suitable gloves compliant with EN ISO 374-1.

### ***Exposure estimation and reference to its source***

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### ***Guidance for downstream users***

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>