

**Fișa cu date de securitate
FASSAFILL EPOXY CLEANER**

Fișa cu date de securitate din data 12/11/2024 versiunea 4

SECȚIUNEA 1: Identificarea substanței/amestecului și a societății/întreprinderii

1.1. Identificator de produs

Identificarea preparatului:

Nume comercial: FASSAFILL EPOXY CLEANER

Cod comercial: 1292

UFI: 4E8D-0YU0-D91N-UGPE

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

Utilizarea recomandată: Detergent pentru îndepărtarea reziduurilor de chit epoxidice; 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)

Eye Irrit. 2 Provoacă o iritare gravă a ochilor.

Skin Sens. 1 Poate provoca o reacție alergică a pielii.

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

H317 Poate provoca o reacție alergică a pielii.

H319 Provoacă o iritare gravă a ochilor.

Fraze de precauție

P261 Evitați să inspirați fumul/gazul/ceapa/vaporii/spray-ul.

P280 Purtați mănuși de protecție și protejați ochii/vederea.

P333+P313 În caz de iritare a pielii sau de erupție cutanată: consultați medicul.

P337+P313 Dacă iritarea ochilor persistă: consultați medicul.

P362+P364 Scoateți îmbrăcămintea contaminată și spălați-o înainte de reutilizare.

P501 Aruncați conținutul/recipientul în conformitate cu reglementarea națională.

Conține:

alcool benzilic

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

Nici una

2.3. Alte pericole

Componentele (Regulamentul (CE) nr. 648/2004): 5 - 15% agenți tensioactivi anionici

Nu conține PBT, vPvB sau perturbatori endocrini
prezenți în concentrații $\geq 0,1\%$.

Nici un alt risc

SECȚIUNEA 3: Compoziție/informații privind componenții

3.1. Substanțe

N.A.

3.2. Amestecuri

Identificarea preparatului: FASSAFILL EPOXY CLEANER

Componente periculoase în sensul Regulamentului CLP și clasificarea corespunzătoare:

Cantitate	Nume	Nr. de Ident.	Clasificare	Număr de înregistrare:
$\geq 15 - < 20 \%$	alcool benzilic	CAS:100-51-6 EC:202-859-9 Index:603-057-00-5	Acute Tox. 4, H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Toxicitate Acută Estimată: ATE - Oral: 1200mg/kg gc	01-2119492630-38-xxxx
$\geq 7 - < 10 \%$	oleate de potasiu	CAS:143-18-0 EC:205-590-5	Skin Irrit. 2, H315; Eye Irrit. 2, H319	
$\geq 7 - < 10 \%$	1-metoxi-2-propanol	CAS:107-98-2 EC:203-539-1 Index:603-064-00-3	Flam. Liq. 3, H226; STOT SE 3, H336	01-2119457435-35-xxxx

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 caz de contact cu ochii, clătiți cu apă pentru un interval de timp corespunzător și țineți deschise pleoapele, după care consultați imediat un oftalmolog.

Protejați ochiul lezat.

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.

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).

SECȚIUNEA 5: Măsuri de combatere a incendiilor

5.1. Mijloace de stingere a incendiilor

Mijloace de stingere corespunzătoare:

Produsul nu este inflamabil

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

Niciunul în mod deosebit.

5.2. Pericole speciale cauzate de substanță sau de amestec

Combustia produce fum greu.

În caz de incendiu și/sau explozie, nu respirați fumul.

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.

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.
- Duceți persoanele în loc sigur.
- 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, clatiti suprafata si materialele folosite cu apa
- Rețineți apa de spălat contaminată și eliminați-o.

6.4. Trimiteri către alte secțiuni

- Vezi și paragrafele 8 și 13

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.
- 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 mincati sau beti in 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.
- Țineți departe de alimente, băuturi și hrană pentru animale.

Materiale incompatibile

- Vezi pct. 10.5

Instrucțiuni privind spațiile de depozitare:

- Spatii ventilate adecvat
- A se feri de îngheț.

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

Recomandări

- Vezi pct. 1.2

Soluții specifice pentru sectorul industrial

- Nici o utilizare particulară

SECȚIUNEA 8: Controale ale expunerii/protecția personală

8.1. Parametri de control

Lista componentelor cu valoarea OEL

alcool benzilic

CAS: 100-51-6	Tip OEL	MAK	Germania	Termen lung 22 mg/m3 - 5 ppm; Termen scurt 44 mg/m3 - 10 ppm Note: Inhalable fraction and vapour, Skin
	Tip OEL	TLV	Cehia	Termen lung 40 mg/m3 - 8.88 ppm; Termen scurt 80 mg/m3 - 17.76 ppm
	Tip OEL	SUVA	Elveția	Termen lung 22 mg/m3 - 5 ppm
	Tip OEL	AGW	Germania	Termen lung 22 mg/m3 - 5 ppm; Termen scurt 44 mg/m3 - 10 ppm Note: Inhalable fraction and vapour
	Tip OEL	NDS	Polonia	Termen lung 240 mg/m3
	Tip OEL	MV	Slovenia	Termen lung 22 mg/m3 - 5 ppm; Termen scurt 44 mg/m3 - 10 ppm Note: Skin

1-metoxi-2-propanol

CAS: 107-98-2	Tip OEL	ACGIH		Termen lung 50 ppm; Termen scurt 100 ppm Note: A4 - Eye and URT irr
	Tip OEL	UE		Termen lung 375 mg/m3 - 100 ppm; Termen scurt 568 mg/m3 - 150 ppm Note: Skin

Tip OEL	MAK	Austria	Termen lung 187 mg/m ³ - 50 ppm; Termen scurt 187 mg/m ³ - 50 ppm
Tip OEL	MAK	Germania	Termen lung 370 mg/m ³ - 100 ppm; Termen scurt 740 mg/m ³ - 200 ppm
Tip OEL	VLEP	Belgia	Termen lung 184 mg/m ³ - 50 ppm; Termen scurt 369 mg/m ³ - 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	Franta	Termen lung 188 mg/m ³ - 50 ppm; Termen scurt 375 mg/m ³ - 100 ppm
Tip OEL	VLEP	Italia	Termen lung 375 mg/m ³ - 100 ppm; Termen scurt 568 mg/m ³ - 150 ppm
Tip OEL	VLEP	România	Termen lung 375 mg/m ³ - 100 ppm; Termen scurt 568 mg/m ³ - 150 ppm
Tip OEL	TLV	Cehia	Termen lung 270 mg/m ³ - 72.09 ppm; Termen scurt 550 mg/m ³ - 146.85 ppm Note: Skin
Tip OEL	VLA	Spania	Termen lung 375 mg/m ³ - 100 ppm; Termen scurt 568 mg/m ³ - 150 ppm Note: Skin
Tip OEL	ÁK	Ungaria	Termen lung 375 mg/m ³ ; Termen scurt 568 mg/m ³
Tip OEL	VLE	Portugalia	Termen lung 375 mg/m ³ - 100 ppm; Termen scurt 568 mg/m ³ - 150 ppm
Tip OEL	SUVA	Elveția	Termen lung 360 mg/m ³ - 100 ppm; Termen scurt 720 mg/m ³ - 200 ppm
Tip OEL	WEL	U.K.	Termen lung 375 mg/m ³ - 100 ppm; Termen scurt 560 mg/m ³ - 150 ppm
Tip OEL	GVI	Croația	Termen lung 375 mg/m ³ - 100 ppm; Termen scurt 568 mg/m ³ - 150 ppm
Tip OEL	AGW	Germania	Termen lung 370 mg/m ³ - 100 ppm; Termen scurt 740 mg/m ³ - 200 ppm
Tip OEL	NDS	Olanda	Termen lung 375 mg/m ³ ; Termen scurt 563 mg/m ³
Tip OEL	NDS	Polonia	Termen lung 180 mg/m ³ ; Termen scurt 360 mg/m ³ Note: Skin
Tip OEL	MV	Slovenia	Termen lung 375 mg/m ³ - 100 ppm; Termen scurt 568 mg/m ³ - 150 ppm Note: Skin

Valori limită de expunere PNEC

alcool benzilic

CAS: 100-51-6

Cale de expunere: Apă dulce; PNEC Limită: 1 mg/l

Cale de expunere: Apă sărată; PNEC Limită: 0.1 mg/l

Cale de expunere: Microorganisme în tratamente de epurare; PNEC Limită: 39 mg/l

Cale de expunere: Sedimente în apă dulce; PNEC Limită: 5.27 mg/kg

Cale de expunere: Sedimente în apă sărată; PNEC Limită: 0.527 mg/kg

Cale de expunere: Sol (agricol); PNEC Limită: 0.456 mg/kg

1-metoxi-2-propanol

CAS: 107-98-2

Cale de expunere: Apă sărată; PNEC Limită: 1 mg/l

Cale de expunere: Apă dulce; PNEC Limită: 10 mg/l

Cale de expunere: Microorganisme în tratamente de epurare; PNEC Limită: 100 mg/l

Cale de expunere: Sedimente în apă sărată; PNEC Limită: 5.2 mg/kg

Cale de expunere: Sedimente în apă dulce; PNEC Limită: 52.3 mg/kg

Cale de expunere: Sol (agricol); PNEC Limită: 4.59 mg/kg

Nivel Derivat Fără Efect (DNEL)

alcool benzilic

CAS: 100-51-6

Cale de expunere: Prin inhalare umană; Frecvență de expunere: Pe termen scurt, efecte sistemice
Lucrător profesionist: 110 mg/m³; Consumator: 27 mg/m³

Cale de expunere: Prin inhalare umană; Frecvență de expunere: Pe termen lung, efecte sistemice
Lucrător profesionist: 22 mg/m³; Consumator: 5.4 mg/m³

Cale de expunere: Epidermic uman; Frecvență de expunere: Pe termen scurt, efecte sistemice
Lucrător profesionist: 40 mg/kg; Consumator: 20 mg/kg

Cale de expunere: Epidermic uman; Frecvență de expunere: Pe termen lung, efecte sistemice
Lucrător profesionist: 8 mg/kg; Consumator: 4 mg/kg

Cale de expunere: Oral uman; Frecvență de expunere: Pe termen scurt, efecte sistemice
Consumator: 20 mg/kg

Cale de expunere: Oral uman; Frecvență de expunere: Pe termen lung, efecte sistemice
Consumator: 4 mg/kg

1-metoxi-2-propanol

CAS: 107-98-2

Cale de expunere: Prin inhalare umană; Frecvență de expunere: Pe termen lung, efecte sistemice
Lucrător profesionist: 369 mg/m³; Consumator: 43.9 mg/m³

Cale de expunere: Prin inhalare umană; Frecvență de expunere: Pe termen scurt, efecte locale
Lucrător profesionist: 553.5 mg/m³

Cale de expunere: Prin inhalare umană; Frecvență de expunere: Pe termen scurt, efecte sistemice
Lucrător profesionist: 553.5 mg/m³

Cale de expunere: Epidermic uman; Frecvență de expunere: Pe termen lung, efecte sistemice
Lucrător profesionist: 183 mg/kg; Consumator: 78 mg/kg

Cale de expunere: Oral uman; Frecvență de expunere: Pe termen lung, efecte sistemice
Consumator: 3.3 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.

Protectia ochilor

Ochelari cu protecție laterală (EN 166).

Protectia pielii

Utilizați îmbrăcăminte corespunzătoare pentru protecția completă a pielii, în funcție de activitate și expunere (EN 14605/EN 13982), de exemplu salopetă de lucru, șorț, încălțăminte de siguranță, îmbrăcăminte corespunzătoare.

Protectia 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); Butil cauciuc (cauciuc butilic): grosime ≥ 0.4 mm; timp de penetrare ≥ 480 min.
NBR (cauciuc nitrilic): grosime ≥ 0.4 mm; timp de penetrare ≥ 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 timpii de utilizare a amestecului.

Protectie 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

Vezi alineatul 7.

SECȚIUNEA 9: Proprietățile fizice și chimice

9.1. Informații privind proprietățile fizice și chimice de bază

Stare fizică: Lichid

Aspect: Lichid

Culoare: galben deschis

Miros: caracteristic

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: neinflamabil; ; Evaluare internă

Limita inferioară și superioară de explozie: N.D.

Punctul de aprindere: $> 93^{\circ}\text{C}$ (Evaluare internă)

Temperatura de autoaprindere: N.D.

Temperatura de descompunere: N.D.

pH: $\geq 10.90 \leq 11.90$ (Metoda internă)

Viscozitatea cinematică: $\leq 20.5 \text{ mm}^2/\text{s}$ (40°C)

Densitatea și/sau densitatea relativă: $1.01 \pm 0.01 \text{ kg/l}$ (Metoda internă)

Densitatea relativă a vaporilor: N.D.

Presiunea vaporilor: N.D.

Solubilitatea în apă: miscibil în toate relațiile

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.
COV % (2010/75/EU): 28.90

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

Niciuna.

10.4. Condiții de evitat

Evitați apropierea de surse de căldură.

10.5. Materiale incompatibile

Nici unul în mod deosebit.

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	Produsul este clasificat: Eye Irrit. 2(H319)
d) sensibilizarea căilor respiratorii sau a pielii	Produsul este clasificat: Skin Sens. 1(H317)
e) mutagenitatea celulelor germinative	Neclasificat Pe baza datelor disponibile, criteriile de clasificare nu sunt îndeplinite.
f) cancerogenitatea	Neclasificat Pe baza datelor disponibile, criteriile de clasificare nu sunt îndeplinite.
g) toxicitatea pentru reproducere	Neclasificat Pe baza datelor disponibile, criteriile de clasificare nu sunt îndeplinite.
h) STOT (toxicitate asupra organelor țintă specifice) - expunere unică	Neclasificat Pe baza datelor disponibile, criteriile de clasificare nu sunt îndeplinite.
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 Pe baza datelor disponibile, criteriile de clasificare nu sunt îndeplinite.

Informații toxicologice referitoare la substanțele principale găsite în acest produs:

alcool benzilic

CAS: 100-51-6 a) toxicitate acută ATE - Oral: 1200 mg/kg gc
LD50 Oral Șobolan 1620 mg/kg

oleate de potasiu

CAS: 143-18-0 a) toxicitate acută LD50 Oral Șobolan > 2000 mg/kg

1-metoxi-2-propanol

CAS: 107-98-2 a) toxicitate acută LD50 Oral Șobolan 4016 mg/kg
LD50 Piele Șobolan > 2000 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:

Lista proprietăților Eco-toxicologice ale produsului

Nu este clasificat pentru pericole pentru mediu

Nu sunt disponibile informații pentru acest produs

Lista componentelor cu proprietăți ecotoxicologice

alcool benzilic

CAS: 100-51-6

- a) Toxicitate acvatică acută: LC50 Pește 460 mg/l 96h
- a) Toxicitate acvatică acută: EC50 Daphnia 230 mg/l 48h
- a) Toxicitate acvatică acută: EC50 Alge 770 mg/l 72h
- b) Toxicitatea acvatică cronică: NOEC Daphnia 51 mg/l 21d
- b) Toxicitatea acvatică cronică: NOEC Alge 310 mg/l 72h

oleate de potasiu

CAS: 143-18-0

- a) Toxicitate acvatică acută: LC50 Pește > 1 mg/l 96h
- a) Toxicitate acvatică acută: EC50 Daphnia > 10 mg/l 48h
- a) Toxicitate acvatică acută: EC50 Alge > 10 mg/l 72h

1-metoxi-2-propanol

CAS: 107-98-2

- a) Toxicitate acvatică acută: LC50 Pește 6812 mg/l 96h
- a) Toxicitate acvatică acută: EC50 Daphnia 23300 mg/l 48h
- a) Toxicitate acvatică acută: EC50 Alge > 1000 mg/l 7d

12.2. Persistență și degradabilitate

alcool benzilic

CAS: 100-51-6

Degradabil în mod rapid

oleate de potasiu

CAS: 143-18-0

Degradabil în mod rapid

1-metoxi-2-propanol

CAS: 107-98-2

Degradabil în mod rapid

12.3. Potențial de bioacumulare

N.A.

12.4. Mobilitate în sol

N.A.

12.5. Rezultatele evaluărilor PBT și vPvB

În baza datelor disponibile, produsul nu conține substanțe PBT/vPvB în procentaj \geq de 0.1%.

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 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

Nu sunt clasificate ca periculoase din punct de vedere al regulamentelor de transport

14.1. Numărul ONU sau numărul de identificare

N/A

14.2. Denumirea corectă ONU pentru expediție

ADR-Nume transport îmbarcare: N/A

IATA-Nume transport îmbarcare: N/A

IMDG-Nume transport îmbarcare: N/A

14.3. Clasa (clasele) de pericol pentru transport

ADR-clasa: N/A

IATA-Clasa: N/A

IMDG-Clasa: N/A

14.4. Grupul de ambalare

ADR-Grup Ambalare: N/A

IATA-Grup Ambalare: N/A

IMDG-Grup Ambalare: N/A

14.5. Pericole pentru mediul înconjurător

Poluant marin: Nu

Poluant ambiental: Nu

IMDG-EMS: N/A

14.6. Precauții speciale pentru utilizatori

Drumuri și Căi Ferate (ADR-RID):

scutiri ADR:

ADR-Etichetă: N/A

ADR - Număr de identificare a pericolului: N/A

ADR-Dispoziții Speciale: N/A

ADR-Cod de restricție în tunel:

Aer (IATA):

IATA-Aeronavă de pasagerit: N/A

IATA-Aeronavă de marfă: N/A

IATA-Etichetă: N/A

IATA-Riscul secundar: N/A

IATA-Erg: N/A

IATA-Dispoziții Speciale: N/A

Mare (IMDG):

IMDG-Depozitare și manipulare: N/A

IMDG-Segregare: N/A

IMDG-Riscul secundar: N/A

IMDG-Dispoziții Speciale: N/A

14.7. Transportul maritim în vrac în conformitate cu instrumentele OMI

N.A.

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)
Regulamentul (EU) nr. 2023/1434 (ATP 19 CLP)
Regulamentul (EU) nr. 2023/1435 (ATP 20 CLP)
Regulamentul (EU) nr. 2024/197 (ATP 21 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
Restricții referitoare la substanțele conținute: 30 (CAS 1589-47-5), 40, 75

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

Nici una

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

Nu există substanțe menționate

Clasa Germană a Periculozității Apei

Clasa 1: puțin periculos pentru ape.

Substanțe SVHC:

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

15.2. Evaluarea securității chimice

Nu a fost efectuată nici o Evaluare de Securitate Chimică pentru amestecul

SECȚIUNEA 16: Alte informații

Cod	Descriere
H226	Lichid și vapori inflamabili.
H302	Nociv în caz de înghițire.
H315	Provoacă iritarea pielii.
H317	Poate provoca o reacție alergică a pielii.
H319	Provoacă o iritare gravă a ochilor.
H336	Poate provoca somnolență sau amețeală.

Cod	Clasa de pericol și categoria de pericol	Descriere
2.6/3	Flam. Liq. 3	Lichid inflamabil, Categoria 3
3.1/4/Oral	Acute Tox. 4	Toxicitate acută (orală), Categoria 4
3.2/2	Skin Irrit. 2	Iritarea pielii, Categoria 2
3.3/2	Eye Irrit. 2	Iritarea ochilor, Categoria 2
3.4.2/1	Skin Sens. 1	Sensibilizarea pielii, Categoria 1
3.4.2/1B	Skin Sens. 1B	Sensibilizarea pielii, Categoria 1B
3.8/3	STOT SE 3	Toxicitate asupra unui organ țintă specific – o singură expunere, 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
Eye Irrit. 2, H319	Metoda de calcul
Skin Sens. 1, H317	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 sa se asigure ca aceste informatii sunt adecvate si corespund domeniului specific de utilizare
Aceasta FTS anuleaza si inlocuieste 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 2: Identificarea pericolelor
- SECȚIUNEA 3: Compoziție/informații privind componenții
- SECȚIUNEA 8: Controale ale expunerii/protecția personală
- SECȚIUNEA 9: Proprietățile fizice și chimice
- SECȚIUNEA 11: Informații toxicologice
- SECȚIUNEA 12: Informații ecologice
- SECȚIUNEA 16: Alte informații

1-methoxy-2-propanol

Substance identification

Chemical Name: 1-methoxy-2-propanol

CAS number: 107-98-2

Date - Version: 08/10/2019- 17.0

USE IN COATINGS (USE IN INDUSTRIAL PLANTS).

TITLE SECTION

Short title of the exposure scenario: Use in coatings. (Use in industrial plants).
ERC4; PROC1, PROC7, PROC8a, PROC8b, PROC9

EXPOSURE SCENARIO CONSIDERED - ERC4

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 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 waste water after risk management measures and treatment in the treatment plant: 87.3 %

Assumed sewage treatment plant flow: 2,000 m³/d

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 fresh water. Risk from environmental exposure is driven by marine water.

Maximum safe use amount: 79,180 kg/day

Risk from environmental exposure is driven by fresh water. Risk from environmental exposure is driven by water.

EXPOSURE SCENARIO CONSIDERED - PROC1

Covered use descriptors

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

Area of use: industrial

Operating conditions

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

Physical state: liquid, medium volatility.

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

It is assumed that the use does not exceed 20°C 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/m³

Risk Characterization Ratio (RCR): 0,0001

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

Estimation of exposure 0.34 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.01

EXPOSURE SCENARIO CONSIDERED - PROC7

Covered use descriptors

PROC7: Industrial spray application Spraying (automatic/robotic)

Area of use: industrial

Operating conditions

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

Physical state: liquid, medium volatility.

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

It is assumed that the use does not exceed 20°C 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC7

Covered use descriptors

PROC7: Industrial spray application Spraying (manual)

Area of use: industrial

Operating conditions

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

Physical state: liquid, medium volatility.

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

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 374. 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC8a

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: ≥ 0% - ≤ 100% 1-methoxy-2-propanol

Physical state: liquid, medium volatility

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

It is assumed that the use does not exceed 20°C 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC8b

Covered use descriptors

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

Area of use: industrial

Operating conditions

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

Physical state: liquid, medium volatility

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

It is assumed that the use does not exceed 20°C 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC9

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

Physical state: liquid, medium volatility

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

It is assumed that the use does not exceed 20°C 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC7

Covered use descriptors

PROC7: Industrial spray application Spraying (automatic/robotic) Spraying (manual)

Area of use: industrial

Operating conditions

Substance concentration: $\geq 0\%$ - $\leq 5\%$ 1-methoxy-2-propanol

Physical state: liquid, medium volatility.

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

It is assumed that the use does not exceed 20°C ambient temperature

Risk management measures

Wear suitable gloves compliant with EN 374. 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC7

Covered use descriptors

PROC7: Industrial spray application Spraying (manual)

Area of use: industrial

Operating conditions

Substance concentration: $\geq 0\%$ - $\leq 5\%$ 1-methoxy-2-propanol

Physical state: liquid, medium volatility.

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

It is assumed that the use does not exceed 20°C ambient temperature

Risk management measures

Wear suitable gloves compliant with EN 374.

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.

EXPOSURE SCENARIO CONSIDERED - PROC8a

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: $\geq 0\%$ - $< 5\%$ 1-methoxy-2-propanol

Physical state: liquid, medium volatility.

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

It is assumed that the use does not exceed 20°C 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/m³

Risk Characterization Ratio (RCR): 0.1

USE IN COATINGS (USE IN INDUSTRIAL PLANTS).

TITLE SECTION

Short title of the exposure scenario: Use in coatings. (Use in industrial plants).

ERC8a, ERC8d; PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC15, PROC19

EXPOSURE SCENARIO CONSIDERED - ERC8a

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 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 waste water after risk management measures and treatment in the treatment plant: 87.3 %

Assumed sewage treatment plant flow: 2,000 m³/d

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 fresh water. Risk from environmental exposure is driven by marine water.

Maximum safe use amount: 15,141 kg/day

Risk from environmental exposure is driven by fresh water. Risk from environmental exposure is driven by marine water.

EXPOSURE SCENARIO CONSIDERED - ERC8d

Covered use descriptors

ERC8d: Wide dispersive external 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 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 waste water after risk management measures and treatment in the treatment plant: 87.3 %

Assumed sewage treatment plant flow: 2,000 m³/d

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 fresh water. Risk from environmental exposure is driven by marine water.

Maximum safe use amount: 15,141 kg/day

Risk from environmental exposure is driven by fresh water. Risk from environmental exposure is driven by marine water.

EXPOSURE SCENARIO CONSIDERED - PROC1

Covered use descriptors

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

Area of use: professional

Operating conditions

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

Physical state: liquid, medium volatility.

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

It is assumed that the use does not exceed 20°C 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/m³

Risk Characterization Ratio (RCR): 0.0001

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

Estimation of exposure 0.34 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.01

EXPOSURE SCENARIO CONSIDERED - PROC2

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: ≥ 0% - ≤ 100% 1-methoxy-2-propanol

Physical state: liquid, medium volatility.

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

It is assumed that the use does not exceed 20°C 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.

EXPOSURE SCENARIO CONSIDERED - PROC2

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: ≥ 0% - ≤ 100% 1-methoxy-2-propanol

Physical state: liquid, medium volatility.

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

It is assumed that the use does not exceed 20°C 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC3

Covered use descriptors

PROC3: Use in batch process (synthesis or formulation): Preparation of material for application

Area of use: professional

Operating conditions

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

Physical state: liquid, medium volatility.

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

It is assumed that the use does not exceed 20°C 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC4

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: ≥ 0% - ≤ 100% 1-methoxy-2-propanol

Physical state: liquid, medium volatility.

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

It is assumed that the use does not exceed 20°C 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC4

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: ≥ 0% - ≤ 100% 1-methoxy-2-propanol

Physical state: liquid, medium volatility.

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

Indoor/Outdoor: Indoor use.

It is assumed that the use does not exceed 20°C 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.

EXPOSURE SCENARIO CONSIDERED - PROC5

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: ≥ 0% - ≤ 100% 1-methoxy-2-propanol

Physical state: liquid, medium volatility.

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

It is assumed that the use does not exceed 20°C ambient temperature

Risk management measures

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour): Effectiveness: 30%

Otherwise, 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC5

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: ≥ 0% - ≤ 100% 1-methoxy-2-propanol

Physical state: liquid, medium volatility.

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

It is assumed that the use does not exceed 20°C 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.

EXPOSURE SCENARIO CONSIDERED - PROC8a

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: ≥ 0% - ≤ 100% 1-methoxy-2-propanol

Physical state: liquid, medium volatility

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

It is assumed that the use does not exceed 20°C 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC8b

Covered use descriptors

PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities. Material transfers. Drum/batch transfers Dedicated plant.

Area of use: professional

Operating conditions

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

Physical state: liquid, medium volatility

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

It is assumed that the use does not exceed 20°C 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC10

Covered use descriptors

PROC10: Application with rollers or brushes. Roller, spatula, jet application.

Area of use: professional

Operating conditions

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

Physical state: liquid, medium volatility

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

It is assumed that the use does not exceed 20°C 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 374. 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC10

Covered use descriptors

PROC10: Application with rollers or brushes Roller, spatula, jet application

Area of use: professional

Operating conditions

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

Physical state: liquid, medium volatility

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

It is assumed that the use does not exceed 20°C ambient temperature.

Risk management measures

Ensure that operations are carried out externally.

Wear suitable gloves compliant with EN 374.

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.

EXPOSURE SCENARIO CONSIDERED - PROC11

Covered use descriptors

PROC11: Non-industrial spray application. Spraying (manual).
Area of use: professional

Operating conditions

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

Physical state: liquid, medium volatility

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

Indoor/Outdoor: Indoor use.

It is assumed that the use does not exceed 20°C 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC11

Covered use descriptors

PROC11: Non-industrial spray application. Spraying (manual).
Area of use: professional

Operating conditions

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

Physical state: liquid, medium volatility

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

It is assumed that the use does not exceed 20°C 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 374. 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC13

Covered use descriptors

PROC13: Treatment of articles by dipping, pouring, enamelling.
Area of use: professional

Operating conditions

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

Physical state: liquid, medium volatility

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

It is assumed that the use does not exceed 20°C ambient temperature.

Risk management measures

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Effectiveness: 30%

Otherwise, 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC13

Covered use descriptors

PROC13: Treatment of articles by dipping and pouring.
Area of use: professional

Operating conditions

Substance concentration: $\geq 0\%$ - $\leq 100\%$ 1-methoxy-2-propanol
Physical state: liquid, medium volatility
Duration and frequency of application: 480 mins. 5 days/week
It is assumed that the use does not exceed 20°C 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.

EXPOSURE SCENARIO CONSIDERED - PROC15

Covered use descriptors

PROC15: Use as laboratory reagent. Laboratory activities.
Area of use: professional

Operating conditions

Substance concentration: $\geq 0\%$ - $\leq 100\%$ 1-methoxy-2-propanol
Physical state: liquid, medium volatility
Duration and frequency of application: 480 mins. 5 days/week
It is assumed that the use does not exceed 20°C 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/m³
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

EXPOSURE SCENARIO CONSIDERED - PROC19

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: $\geq 0\%$ - $\leq 100\%$ 1-methoxy-2-propanol
Physical state: liquid, medium volatility
Duration and frequency of application: 480 mins. 5 days/week
It is assumed that the use does not exceed 20°C 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/m³
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

EXPOSURE SCENARIO CONSIDERED - PROC19

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: $\geq 0\%$ - $\leq 100\%$ 1-methoxy-2-propanol
Physical state: liquid, medium volatility
Duration and frequency of application: 480 mins. 5 days/week
It is assumed that the use does not exceed 20°C 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.

USE IN COATINGS (USE IN INDUSTRIAL PLANTS).

TITLE SECTION

Short title of the exposure scenario: Use in coatings. (Use in industrial plants).

ERC8a, ERC8b; PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC15, PROC19

EXPOSURE SCENARIO CONSIDERED - ERC8a

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 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 waste water after risk management measures and treatment in the treatment plant: 87.3 %

Assumed sewage treatment plant flow: 2,000 m³/d

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 fresh water. Risk from environmental exposure is driven by marine water.

Maximum safe use amount: 15.141 kg/day

Risk from environmental exposure is driven by fresh water. Risk from environmental exposure is driven by marine water.

EXPOSURE SCENARIO CONSIDERED - ERC8d

Covered use descriptors

ERC8d: Wide dispersive external 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 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 waste water after risk management measures and treatment in the treatment plant: 87.3 %

Assumed sewage treatment plant flow: 2,000 m³/d

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 fresh water. Risk from environmental exposure is driven by marine water.

Maximum safe use amount: 15.141 kg/day

Risk from environmental exposure is driven by fresh water. Risk from environmental exposure is driven by marine water.

EXPOSURE SCENARIO CONSIDERED - PROC1

Covered use descriptors

PROC1: Use in closed process, no likelihood of exposure. General exposure (closed systems)

Area of use: professional

Operating conditions

Substance concentration: ≥ 0 % - ≤ 5 % 1-methoxy-2-propanol

Physical state: liquid, medium volatility.

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

It is assumed that the use does not exceed 20°C ambient temperature

Exposure estimation and reference to its source

PROC1

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.

EXPOSURE SCENARIO CONSIDERED - PROC2

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: $\geq 0\%$ - $\leq 5\%$ 1-methoxy-2-propanol
Physical state: liquid, medium volatility.
Duration and frequency of application: 480 mins. 5 days/week
It is assumed that the use does not exceed 20°C 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.

EXPOSURE SCENARIO CONSIDERED - PROC2

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: $\geq 0\%$ - $\leq 5\%$ 1-methoxy-2-propanol
Physical state: liquid, medium volatility.
Duration and frequency of application: 480 mins. 5 days/week
It is assumed that the use does not exceed 20°C 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/m³
Risk Characterization Ratio (RCR): 0.04
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

EXPOSURE SCENARIO CONSIDERED - PROC3

Covered use descriptors

PROC3: Use in batch process (synthesis or formulation) Preparation of material for application
Area of use: professional

Operating conditions

Substance concentration: $\geq 0\%$ - $\leq 5\%$ 1-methoxy-2-propanol
Physical state: liquid, medium volatility.
Duration and frequency of application: 480 mins. 5 days/week
It is assumed that the use does not exceed 20°C 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/m³
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

EXPOSURE SCENARIO CONSIDERED - PROC4

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: $\geq 0\%$ - $\leq 5\%$ 1-methoxy-2-propanol
Physical state: liquid, medium volatility.
Duration and frequency of application: 480 mins. 5 days/week
It is assumed that the use does not exceed 20°C 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/m³
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

EXPOSURE SCENARIO CONSIDERED - PROC4

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: $\geq 0\%$ - $\leq 5\%$ 1-methoxy-2-propanol

Physical state: liquid, medium volatility.

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

Indoor/Outdoor: Indoor use.

It is assumed that the use does not exceed 20°C 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.

EXPOSURE SCENARIO CONSIDERED - PROC5

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: $\geq 0\%$ - $\leq 5\%$ 1-methoxy-2-propanol

Physical state: liquid, medium volatility.

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

It is assumed that the use does not exceed 20°C 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC5

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: $\geq 0\%$ - $\leq 5\%$ 1-methoxy-2-propanol

Physical state: liquid, medium volatility.

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

It is assumed that the use does not exceed 20°C ambient temperature

Risk management measures

Ensure that operations are carried out externally.

Exposure estimation and reference to its source

PROC5

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.

EXPOSURE SCENARIO CONSIDERED - PROC8a

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: $\geq 0\%$ - $\leq 5\%$ 1-methoxy-2-propanol

Physical state: liquid, medium volatility

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

It is assumed that the use does not exceed 20°C 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC8b

Covered use descriptors

PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities. Material transfers. Drum/batch transfers Dedicated plant.
Area of use: professional

Operating conditions

Substance concentration: $\geq 0\%$ - $\leq 5\%$ 1-methoxy-2-propanol

Physical state: liquid, medium volatility

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

It is assumed that the use does not exceed 20°C 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC10

Covered use descriptors

PROC10: Application with rollers or brushes. Roller, spatula, jet application.

Area of use: professional

Operating conditions

Substance concentration: $\geq 0\%$ - $\leq 5\%$ 1-methoxy-2-propanol

Physical state: liquid, medium volatility

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

It is assumed that the use does not exceed 20°C 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC10

Covered use descriptors

PROC10: Application with rollers or brushes. Roller, spatula, jet application.

Area of use: professional

Operating conditions

Substance concentration: $\geq 0\%$ - $\leq 5\%$ 1-methoxy-2-propanol

Physical state: liquid, medium volatility

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

Indoor/Outdoor: Outdoor use

It is assumed that the use does not exceed 20°C ambient temperature.

Exposure estimation and reference to its source

PROC10

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.

EXPOSURE SCENARIO CONSIDERED - PROC11

Covered use descriptors

PROC11: Non-industrial spray application. Spraying (manual).

Area of use: professional

Operating conditions

Substance concentration: $\geq 0\%$ - $\leq 5\%$ 1-methoxy-2-propanol

Physical state: liquid, medium volatility

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

It is assumed that the use does not exceed 20°C 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC11

Covered use descriptors

PROC11: Non-industrial spray application. Spraying (manual).
Area of use: professional

Operating conditions

Substance concentration: $\geq 0\%$ - $\leq 5\%$ 1-methoxy-2-propanol
Physical state: liquid, medium volatility
Duration and frequency of application: 480 mins. 5 days/week
It is assumed that the use does not exceed 20°C 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.

EXPOSURE SCENARIO CONSIDERED - PROC13

Covered use descriptors

PROC13: Treatment of articles by dipping and pouring.
Area of use: professional

Operating conditions

Substance concentration: $\geq 0\%$ - $\leq 5\%$ 1-methoxy-2-propanol
Physical state: liquid, medium volatility
Duration and frequency of application: 480 mins. 5 days/week
It is assumed that the use does not exceed 20°C 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/m³
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

EXPOSURE SCENARIO CONSIDERED - PROC13

Covered use descriptors

PROC13: Treatment of articles by dipping and pouring.
Area of use: professional

Operating conditions

Substance concentration: $\geq 0\%$ - $\leq 5\%$ 1-methoxy-2-propanol
Physical state: liquid, medium volatility
Duration and frequency of application: 480 mins. 5 days/week
Indoor/Outdoor: Internal use
It is assumed that the use does not exceed 20°C ambient temperature.

Exposure estimation and reference to its source

PROC13
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.

EXPOSURE SCENARIO CONSIDERED - PROC15

Covered use descriptors

PROC15: Use as a laboratory reagent Laboratory activities
Area of use: professional

Operating conditions

Substance concentration: $\geq 0\%$ - $\leq 5\%$ 1-methoxy-2-propanol
Physical state: liquid, medium volatility
Duration and frequency of application: 480 mins. 5 days/week
It is assumed that the use does not exceed 20°C 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/m³
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

EXPOSURE SCENARIO CONSIDERED - PROC19

Covered use descriptors

PROC19: Manual mixing with direct contact using only personal protective equipment. Hand application, finger paints, crayons, stickers
Area of use: professional

Operating conditions

Substance concentration: $\geq 0\%$ - $\leq 5\%$ 1-methoxy-2-propanol

Physical state: liquid, medium volatility

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

It is assumed that the use does not exceed 20°C ambient temperature.

Risk management measures

Wear suitable gloves compliant with EN 374. 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC19

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: $\geq 0\%$ - $\leq 5\%$ 1-methoxy-2-propanol

Physical state: liquid, medium volatility

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

Indoor/Outdoor Outdoor use

It is assumed that the use does not exceed 20°C ambient temperature.

Risk management measures

Wear suitable gloves compliant with EN 374.

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.

USE IN DETERGENTS (USE IN INDUSTRIAL PLANTS).

TITLE SECTION

Short title of the exposure scenario: Use in detergents. (Use in industrial plants).
ERC8a, ERC8d; PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC10, PROC11, PROC13

EXPOSURE SCENARIO CONSIDERED - ERC8a

Covered use descriptors

ERC8a: Wide dispersive indoor use of processing aids in open systems.

Operating conditions

Yearly amount used in EU: 5,200,000 kg
Daily amount per site: 0.71 kg
Minimum emission days per year: 365
Emission factor to air: 2 %
Emission factor in water: 0.001 %
Emission factor in soil: 0 %
Releases based on information from ESVO/CEFIC
Freshwater dilution factor: 10
Marine water dilution factor: 100

Risk management measures

Treat air emissions to provide a typical removal efficiency of (%) 70 %
Type of treatment plant: Municipal sewage treatment plant.
Total removal efficiency of the substance from the waste water after risk management measures and treatment in the treatment plant: 87.3 %
Assumed sewage treatment plant flow: 2,000 m³/d

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): 0.00138
Risk from environmental exposure is driven by marine water.
Maximum safe use amount: 550 kg/day
Risk from environmental exposure is driven by fresh water. Risk from environmental exposure is driven by marine water.

EXPOSURE SCENARIO CONSIDERED - ERC8d

Covered use descriptors

ERC8d: Wide dispersive external use of processing aids in open systems.

Operating conditions

Yearly amount used in EU: 5,200,000 kg
Daily amount per site: 0.71 kg
Minimum emission days per year: 365
Emission factor to air: 2 %
Emission factor in water: 0.001 %
Emission factor in soil: 0 %
Releases based on information from ESVO/CEFIC
Freshwater dilution factor: 10
Marine water dilution factor: 100
Other factors: Outdoor use.

Risk management measures

Treat air emissions to provide a typical removal efficiency of (%) 70 %
Type of treatment plant: Municipal sewage treatment plant.
Total removal efficiency of the substance from the waste water after risk management measures and treatment in the treatment plant: 87.3 %
Assumed sewage treatment plant flow: 2,000 m³/d

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): 0.00138
Risk from environmental exposure is driven by marine water.
Maximum safe use amount: 550 kg/day
Risk from environmental exposure is driven by marine water.

EXPOSURE SCENARIO CONSIDERED - PROC2

Covered use descriptors

PROC2: Use in closed, continuous process with occasional controlled exposure. Automated process with (semi) closed systems. Use in contained systems.
Area of use: professional

Operating conditions

Substance concentration: ≥ 0 % - ≤ 100 % 1-methoxy-2-propanol
Physical state: liquid, medium volatility.
Duration and frequency of application: 480 mins. 5 days/week
It is assumed that the use does not exceed 20°C 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC3

Covered use descriptors

PROC3: Use in batch process (synthesis or formulation). Use in contained systems. Drum/batch transfers. Automated process with (semi) closed systems.

Area of use: professional

Operating conditions

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

Physical state: liquid, medium volatility.

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

It is assumed that the use does not exceed 20°C 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC4

Covered use descriptors

PROC4: Use in batch and other processes (synthesis) where opportunity for exposure arises. Semi-automatic process. Application of cleaning products in closed systems. Cleaning of medical devices.

Area of use: professional

Operating conditions

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

Physical state: liquid, medium volatility.

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

It is assumed that the use does not exceed 20°C 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC4

Covered use descriptors

PROC4: Use in batch and other processes (synthesis) where opportunity for exposure arises. Application of cleaning products in closed systems.

Area of use: professional

Operating conditions

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

Physical state: liquid, medium volatility.

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

It is assumed that the use does not exceed 20°C 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.

EXPOSURE SCENARIO CONSIDERED - PROC4

Covered use descriptors

PROC4: Use in batch and other processes (synthesis) where opportunity for exposure arises. Cleaning of medical devices.

Area of use: professional

Operating conditions

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

Physical state: liquid, medium volatility.

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

It is assumed that the use does not exceed 20°C ambient temperature.

Exposure estimation and reference to its source

PROC4

Evaluation method: ESIG GES tool, operator. Workers - all relevant routes of exposure.

The use has been assessed as safe.

EXPOSURE SCENARIO CONSIDERED - PROC8a

Covered use descriptors

PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities. Filling/Preparation of equipment required for drums and containers. Non-dedicated system.

Area of use: professional

Operating conditions

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

Physical state: liquid, medium volatility

Duration and frequency of application: 240 mins. 5 days/week

It is assumed that the use does not exceed 20°C ambient temperature.

Risk management measures

Ensure that operations are carried out externally. Effectiveness: 30%

Exposure estimation and reference to its source

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

Exposure estimation: 157.68 mg/m³

Risk Characterization Ratio (RCR): 0.43

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

EXPOSURE SCENARIO CONSIDERED - PROC8b

Covered use descriptors

PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities. Filling/Preparation of equipment required for drums and containers. Dedicated plant.

Area of use: professional

Operating conditions

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

Physical state: liquid, medium volatility

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

It is assumed that the use does not exceed 20°C 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC10

Covered use descriptors

PROC10: Application with rollers or brushes. Low pressure cleaning with detergents.

Area of use: professional

Operating conditions

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

Physical state: liquid, medium volatility

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

It is assumed that the use does not exceed 20°C ambient temperature.

Risk management measures

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

Exposure estimation and reference to its source

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

Exposure estimation: 112.63 mg/m³

Risk Characterization Ratio (RCR): 0.31

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

EXPOSURE SCENARIO CONSIDERED - PROC10

Covered use descriptors

PROC10: Application with rollers or brushes. Surface cleaning (manual) by fogging.

Area of use: professional

Operating conditions

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

Physical state: liquid, medium volatility

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

It is assumed that the use does not exceed 20°C ambient temperature.

Risk management measures

Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Effectiveness: 30%

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

Exposure estimation and reference to its source

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

Exposure estimation: 262.79 mg/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC10

Covered use descriptors

PROC10: Application with rollers or brushes. Manual application by fogging, dipping etc. Rolling/brushing

Area of use: professional

Operating conditions

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

Physical state: liquid, medium volatility

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

It is assumed that the use does not exceed 20°C ambient temperature.

Risk management measures

Provide extract ventilation in points where emissions occur (LEV). 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/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC11

Covered use descriptors

PROC11: Non-industrial spray application. Cleaning with high pressure washers

Area of use: professional

Operating conditions

Substance concentration: ≥ 0% - ≤ 5 % 1-methoxy-2-propanol

Physical state: liquid, medium volatility

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

Indoor/Outdoor Internal use

It is assumed that the use does not exceed 20°C 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 374. Effectiveness: 80%

Exposure estimation and reference to its source

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

Exposure estimation: 112.63 mg/m³

Risk Characterization Ratio (RCR): 0.31

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

EXPOSURE SCENARIO CONSIDERED - PROC11

Covered use descriptors

PROC11: Non-industrial spray application. Cleaning with high pressure washers

Area of use: professional

Operating conditions

Substance concentration: ≥ 0% - ≤ 5 % 1-methoxy-2-propanol

Physical state: liquid, medium volatility

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

It is assumed that the use does not exceed 20°C ambient temperature.

Risk management measures

Ensure that operations are carried out externally. Effectiveness: 30%

Wear chemically resistant gloves in combination with "basic" employee training. Effectiveness: 90%

Exposure estimation and reference to its source

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

Exposure estimation: 262.79 mg/m³

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

EXPOSURE SCENARIO CONSIDERED - PROC13

Covered use descriptors

PROC13: Treatment of articles by dipping and pouring. Surface cleaning (manual). Enamelling, dipping and pouring.
Area of use: professional

Operating conditions

Substance concentration: $\geq 0\%$ - $\leq 100\%$ 1-methoxy-2-propanol
Physical state: liquid, medium volatility
Duration and frequency of application: 480 mins. 5 days/week
It is assumed that the use does not exceed 20°C ambient temperature.

Risk management measures

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

Exposure estimation and reference to its source

Evaluation method: ESIG GES tool, operator. Worker - inhalation, long-term - systemic
Exposure estimation: 112.63 mg/m³
Risk Characterization Ratio (RCR): 0.31
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

Benzyl alcohol

Substance identification

Chemical Name: Benzyl alcohol

CAS number: 100-51-6

Date: 07/12/2012

INDUSTRIAL USE

Exposure scenario for industrial use in adhesives, sealants, coatings and paints, fillers, finger paints, metallic and non-metallic surface treatment products, inks and toners (PC1, PC9a, PC9b, PC9c, PC14, PC15, PC18)

1. TITLE

Systematic title based on the use descriptor: SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

Processes, activities covered:

Mixing or dilution in batch processes

Processing by compression/pelletisation, calendaring or use during foam production

Transfer operations from/to large or small containers

Treatment of objects by brush/roller application, spraying or immersion/pouring

Lubrication at high energy conditions

Use as a laboratory agent

Handling of substances bound in materials/articles

Evaluation method:

ECETOC TRA (April 2010), EUSES (v.2.1)

2. OPERATING CONDITIONS AND RISK MANAGEMENT MEASURES

Process categories for human health and environmental release categories for exposure assessment:

PC1: PROC5, 7, 8a, 8b, 9, 10, 12, 13, 14 spERC ESVO 5 (related to ERC4)

PC9a/b/c: PROC5, 7, 8a, 8b, 9, 10, 13 spERC ESVO 5 (related to ERC4)

PC14: PROC5, 8a, 8b, 9, 15, 23, 24, 25 spERC ESVO 5 (related to ERC4)

PC15: PROC5, 8a, 8b, 9, 15 spERC ESVO 5 (related to ERC4)

PC18: PROC7, 8a, 8b, 9, 10, 13 spERC ESVO 5 (related to ERC4)

2.1 EXPOSURE SCENARIO CONTROLLING WORKER EXPOSURE FOR PROC5, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC12, PROC13, PROC14, PROC15

Product features

Concentration ≤ 40%

Physical state: liquid

Quantity used

Not applicable

Frequency and duration of use/exposure

Duration of exposure per day: 8h (full shift, indoors)

Duration of exposure per year: 230 days

Human factors not influenced by risk management

Breathing volume in the conditions of use: 10 m³/8h-day (light activity)

Body weight: 70kg (worker)

Other operational conditions affecting worker exposure

Internal use

Use at room temperature

Technical conditions and measures to control dispersion from source to the worker

Local vapor ventilation (efficiency > 90 %) or other adequate ventilation required

Organizational measures to prevent/limit releases, dispersion and exposure

Only properly trained and authorized personnel can handle the substance. Substance handling procedures must be well documented and controlled.

Conditions and measures related to personal protection, hygiene and health evaluation

PROC7:

Respiratory protection recommended (95% efficiency) as described in section 8.

Wear safety goggles as described in section 8.

Wear protective clothing as described in section 8.

2.2 EXPOSURE SCENARIO CONTROLLING WORKER EXPOSURE FOR PROC23, PROC24, PROC25

Product features

Concentration ≤ 40%

Physical state: liquid

Quantity used

Not applicable

Frequency and duration of use/exposure

Duration of exposure per day: 8h (full shift, indoors and outdoors)

Duration of exposure per year: 230 days

Human factors not influenced by risk management

Breathing volume in the conditions of use: 10 m³/8h-day (light activity)

Body weight: 70kg (worker)

Other operational conditions affecting worker exposure

Indoor use.

Use at room temperature

Technical conditions and measures to control dispersion from source to the worker

Local vapor ventilation (efficiency > 90 %) or other adequate ventilation required.

Organizational measures to prevent/limit releases, dispersion and exposure

Only properly trained and authorized personnel can handle the substance. Substance handling procedures must be well documented and controlled.

Conditions and measures related to personal protection, hygiene and health evaluation

Wear safety goggles as described in section 8.

Wear protective clothing as described in section 8.

2.3 EXPOSURE SCENARIO CONTROLLING ENVIRONMENTAL EXPOSURE FOR SPERC ESVOG 5 - RELATED TO ERC4

Product features

Not relevant

Quantity used

Number of sites: > 1

Yearly amount used in the region: PC 1, 9a, 9b, 9c, 14, 15, 18: 412 to: 570 to (10 % rule applies)

Frequency and duration of use

spERC ESVOG 5 (related to ERC4): 300 days/year

Environmental factors not influenced by risk management

Local fresh water dilution factor: 10

Receiving surface water flow: 18,000 m³/d

Local seawater dilution factor 100

Other operational conditions affecting environmental exposure

Indoor and outdoor use

Technical conditions and measures at process level (source) to prevent release

spERC ESVOC 5 (related to ERC4):

Fraction of tonnage released to air: 9,8 %

Fraction of tonnage released to wastewater: 2 %

Fraction of tonnage released into industrial ground: 0 %

Local technical conditions and measures to reduce and limit discharges, atmospheric emissions and soil release

Waste water must be sent to a dedicated treatment plant or treated with other suitable techniques. Floors should be waterproof and resistant to liquids.

Organizational measures to prevent/limit release from site

Only properly trained and authorized personnel can handle the substance. Substance handling procedures must be well documented and controlled.

Conditions and measures for the domestic sewage treatment plant

Dimensions of wastewater treatment plant: 2000 m³/d (removal rate: 87.4 %)

Conditions and measures for external treatment of waste for disposal

No specific measures. For general conditions and measures, see section 13.

Conditions and measures for external recovery of waste

No specific measures. For general conditions and measures, see section 13.

3. EXPOSURE ESTIMATION AND REFERENCE TO ITS SOURCE

Workers

Exposure assessment (human):

ECETOC TRA model (April 2010 version). Dermal exposure estimates of ECETOC TRA have been corrected for concentration.

Exposure estimation:

Individual and combined (skin and inhalation) exposure values are below the DNELs (RCR ratios < 1).

Environment

Exposure assessment (environment):

EUSES 2.1: ERC4 modified with ESVOC 5 (ESVOC SPERC 4.3a.v1)

Exposure estimation:

The predicted exposure concentrations for air, water and soil are lower than the derived PNECs, giving an RCR < 1.

4. GUIDANCE FOR DOWNSTREAM USERS TO ASSESS WHETHER THEY COMPLY WITH THE LIMITS SET BY THE EXPOSURE SCENARIO

Environment:

Under the conditions listed above the process is considered safe. Direct release to water and soil should be avoided, air emissions should be minimised. Other conditions should be considered only when adequate measurements or calculations demonstrate that the RCR remains < 1.

Health:

Under the conditions listed above the process is considered safe. Other conditions should be considered only when adequate measurements or calculations demonstrate that the RCR remains < 1.

Further good practice advice beyond the REACH CSA

Environment: Not applicable

Health: On possible contact with the product (sampling, use, spills, product leaks, cleaning): wear protective clothing. Wear protective gloves and safety goggles. See section 8 for information on appropriate personal protective equipment.

PROFESSIONAL USE

Exposure scenario for professional uses of benzyl alcohol consisting of mixing/loading and charging/discharging, roller, brush, spray or dip application (PC0, PC1, PC09a, 9b, 9c, PC14, PC15, PC18, PC21, PC26, PC31, PC32).

1. TITLE

Systematic title based on the use descriptor: SU22 - Professional uses: Generalized use

Processes, activities covered:

Mixing or dilution in batch processes BY HAND

Transfer operations from/to large or small containers

Treatment of objects by brush/roller application, spraying or immersion/pouring

Hand mixing with intimate contact and only PSD available

Handling of substances bound in materials/articles

Evaluation method:

ECETOC TRA (April 2010), EUSES (v.2.1)

2. OPERATING CONDITIONS AND RISK MANAGEMENT MEASURES

Process categories for human health and environmental release categories for exposure assessment:

PC0: PROC5, 8a, 8b, 9, 10, 11, 13, 19 - ERC8a, 8d

PC1: PROC5, 8a, 8b, 9, 10, 11, 13, 19 - ERC8a, 8d

PC9a, 9b, 9c: PROC5, 8a, 8b, 9, 10, 11, 13, 19 - ERC8a, 8d

PC14: PROC8a, 8b, 9, 10, 11, 13, 19, 23, 24, 25 - ERC8a, 8d

PC15: PROC8a, 8b, 9, 10, 11, 13, 19 - ERC8a, 8d

PC18: PROC5, 8a, 8b, 10, 11, 13, 19 - ERC8a, 8d

PC21: PROC8a, 8b, 15 - ERC8a, 8d

PC26: PROC5, 6, 8a, 8b, 11, 13, 14, 19, 21 - ERC8a, 8d

PC30: PROC8a, 8b - ERC8a, 8d

PC31: PROC8b, 10, 11 - ERC8a, 8d

PC32: PROC8a, 8b, 9, 10, 11 - ERC8a, 8d

Number of sites: > 1

2.1 EXPOSURE SCENARIO CONTROLLING WORKER EXPOSURE FOR PROC5, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC12, PROC13, PROC14, PROC15

Product features

Concentration ≤ 40%

Physical state: liquid

Quantity used

Not applicable

Frequency and duration of use/exposure

Duration of exposure per day: 8h (full shift, indoors and outdoors)

Duration of exposure per year: 230 days

Human factors not influenced by risk management

Breathing volume in the conditions of use: 10 m³/8h-day (light activity)

Body weight: 70kg (worker)

Other operational conditions affecting worker exposure

Internal use

Use at room temperature

Technical conditions and measures to control dispersion from source to the worker

No special measures are required.

Organizational measures to prevent/limit releases, dispersion and exposure

Only properly trained and authorized personnel can handle the substance. Substance handling procedures must be well documented and controlled.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection:

PROC8b, PROC9, PROC14, PROC15: concentration ≤ 40 %: no RMM required.

PROC5, PROC8a, PROC13: > 25 % - ≤ 40 %: gloves (90 % efficiency) are required as described in section 8.

PROC6: > 5 % - ≤ 40 %: gloves (90 % efficiency) are required as described in section 8.

PROC10: < 5 % (indoor and outdoor environment): No RMMs required.

> 5 - ≤ 40 % (indoor and outdoor environment): gloves (90 % efficiency) are required as described in point 8.

Wear safety goggles as described in section 8.

Wear protective clothing as described in section 8.

2.2 EXPOSURE SCENARIO CONTROLLING WORKER EXPOSURE FOR PROC11

Product features

Concentration ≤ 40 %

Physical state: liquid

Quantity used

Not applicable

Frequency and duration of use/exposure

Duration of exposure per day: 8h (full shift, indoors and outdoors)

Duration of exposure per year: 230 days

Human factors not influenced by risk management

Breathing volume in the conditions of use: 10 m³/8h-day (light activity)

Body weight: 70kg (worker)

Other operational conditions affecting worker exposure

Indoor and outdoor use

Use at room temperature

Technical conditions and measures to control dispersion from source to the worker

No special measures are required.

Organizational measures to prevent/limit releases, dispersion and exposure

Only properly trained and authorized personnel can handle the substance. Substance handling procedures must be well documented and controlled.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection:

≤ 5 % (indoor and outdoor environment): Respiratory protection (95 % efficiency) required as described in section 8.

> 5 % ≤ 40 % (indoor and outdoor environment): Respiratory protection (95 % efficiency) and gloves (90 % efficiency) required as described in section 8.

Wear safety goggles as described in section 8.

Wear protective clothing as described in section 8.

2.3 EXPOSURE SCENARIO CONTROLLING WORKER EXPOSURE FOR PROC19

Product features

Concentration ≤ 40 %

Physical state: liquid

Quantity used

Not applicable

Frequency and duration of use/exposure

Duration of exposure per day (concentration ≤ 25 %): 8 hours (indoors and outdoors)

Duration of exposure per day (concentration $>25\% \leq 40\%$): 4 hours (indoors and outdoors)

Duration of exposure per year: 230 days

Human factors not influenced by risk management

Breathing volume in the conditions of use: 10 m³/8h-day (light activity)

Body weight: 70kg (worker)

Other operational conditions affecting worker exposure

Indoor and outdoor use

Use at room temperature

Technical conditions and measures to control dispersion from source to the worker

No special measures are required.

Organizational measures to prevent/limit releases, dispersion and exposure

Only properly trained and authorized personnel can handle the substance. Substance handling procedures must be well documented and controlled.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection:

> 1 % (indoor): gloves (90 % efficiency) are required as described in section 8.

> 5% - 40% (outdoors): gloves (90 % efficiency) are required as described in section 8.

Wear safety goggles as described in section 8.

Wear protective clothing as described in section 8.

2.4 EXPOSURE SCENARIO CONTROLLING ENVIRONMENTAL EXPOSURE FOR ERC8a, ERC8d

Product features

Not relevant

Quantity used

Yearly amount used in the region: the 10% rule applies

ERC8a PC0, 1, 9a, 9b, 9c, 14, 15, 18, 21, 26, 30, 31, 32, 34, 35: 1,785t

ERC8d PC0, 1, 9a, 9b, 9c, 14, 15, 18, 21, 26, 31, 32, 34, 35: 1,775t

Fraction of main local source: 0.002 (default)

Issue days per site: 365 days/year (default)

Frequency and duration of use

Continuous release: 365 days/year

Environmental factors not influenced by risk management

Local fresh water dilution factor: 10

Receiving surface water flow: 18,000 m³/d

Local seawater dilution factor local: 100

Other operational conditions affecting environmental exposure

Indoor / outdoor environment

Technical conditions and measures at process level (source) to prevent release

No special measures are required.

Local technical conditions and measures to reduce and limit discharges, atmospheric emissions and soil release

Waste water must be sent to a dedicated treatment plant or treated with other suitable techniques.

Organizational measures to prevent release from site

Only properly trained and authorized personnel can handle the substance. Substance handling procedures must be well documented and controlled.

Conditions and measures for the domestic sewage treatment plant

Dimensions of wastewater treatment plant: 2000 m³/d (removal rate: 87.4 %)

Conditions and measures for external treatment of waste for disposal

No specific measures. For general conditions and measures, see section 13.

Conditions and measures for external recovery of waste

No specific measures. For general conditions and measures, see section 13.

3. EXPOSURE ESTIMATION AND REFERENCE TO ITS SOURCE

Workers

PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC14, PROC15, PROC19

Exposure assessment (human):

PROC5, PROC6, PROC8b, PROC9, PROC11, PROC13, PROC14, PROC15

ECETOC TRA model (April 2010 version). Dermal exposure estimates of ECETOC TRA have been linearly corrected for concentration.

PROC8a, PROC10

ECETOC TRA model (April 2010 version). Dermal exposure estimates of ECETOC TRA have been linearly corrected for concentration. Local and systemic exposure via inhalation of ECETOC TRA has been linearly scaled based on the concentration.

PROC19

ECETOC TRA model (April 2010 version). The dermal exposure estimates of ECETOC TRA have been linearly corrected for the concentration and according to the EMFs of CEFIC for the duration of exposure. Local exposure via inhalation of ECETOC TRA has been linearly scaled based on the concentration and in accordance with the CEFIC EMFs for the duration of exposure. Systemic exposure via inhalation has been linearly scaled for the duration of exposure.

Exposure estimation:

Individual and combined (skin and inhalation) exposure values are below the DNELs (RCR ratios < 1).

Environment

ERC8a, ERC8d

Exposure assessment (environment):

EUSES 2.1.

Exposure estimation:

The predicted exposure concentrations for air, water and soil are lower than the derived PNECs, giving an RCR < 1.

4. GUIDANCE FOR DOWNSTREAM USERS TO ASSESS WHETHER THEY COMPLY WITH THE LIMITS SET BY THE EXPOSURE SCENARIO

Environment:

Under the conditions listed above the process is considered safe. Direct release to water and soil should be avoided, air emissions should be minimised. Other conditions should be considered only when adequate measurements or calculations demonstrate that the RCR remains < 1.

Health:

Under the conditions listed above the process is considered safe. Other conditions should be considered only when adequate measurements or calculations demonstrate that the RCR remains < 1.

Further good practice advice beyond the REACH CSA

Environment: Not applicable

Health: On possible contact with the product (sampling, use, spills, product leaks, cleaning): wear protective clothing. Wear protective gloves and safety goggles. See section 8 for information on appropriate personal protective equipment.

PROFESSIONAL USE

Exposure scenario for professional use in photochemicals (PC30)

1. TITLE

Systematic title based on the use descriptor: SU22 - Professional uses: Generalized use

Processes, activities covered:

Transfer operations from/to large or small containers

Evaluation method:

ECETOC TRA (April 2010), EUSES (v.2.1)

2. OPERATING CONDITIONS AND RISK MANAGEMENT MEASURES

Human Health Exposure/Environmental Exposure:

PC30: PROC8a, 8b - ERC8a, 8d

Number of sites: > 1

2.1 EXPOSURE SCENARIO CONTROLLING WORKER EXPOSURE FOR PROC8a E PROC8b

Product features

Concentration \leq 40%

Physical state: liquid

Quantity used

Not applicable

Frequency and duration of use/exposure

Duration of exposure per day: 8h (full shift, indoors and outdoors)

Duration of exposure per year: 230 days

Human factors not influenced by risk management

Breathing volume in the conditions of use: 10 m³/8h-day (light activity)

Body weight: 70kg (worker)

Other operational conditions affecting worker exposure

Internal use

Use at room temperature

Technical conditions and measures to control dispersion from source to the worker

No special measures are required.

Organizational measures to prevent/limit releases, dispersion and exposure

Only properly trained and authorized personnel can handle the substance. Substance handling procedures must be well documented and controlled.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection:

PROC8b: concentration \leq 40 %: no RMM required.

PROC8a: > 25 % - \leq 40 %: gloves (90 % efficiency) are required as described in section 8.

Wear safety goggles as described in section 8.

Wear protective clothing as described in section 8.

2.2 EXPOSURE SCENARIO CONTROLLING ENVIRONMENTAL EXPOSURE FOR ERC8a, ERC8b

Product features

Not relevant

Quantity used

Yearly amount used in the region: the 10% rule applies

ERC8a PC30: 1.785 t

ERC8d PC30: 190 t

Fraction of main local source: 0.002 (default)

Issue days per site: 365 days/year (default)

Frequency and duration of use

Continuous release: 365 days/year

Environmental factors not influenced by risk management

Local fresh water dilution factor: 10

Receiving surface water flow: 18,000 m³/d

Local seawater dilution factor local: 100

Other operational conditions affecting environmental exposure

No special measures are required.

Technical conditions and measures at process level (source) to prevent release

No special measures are required.

Local technical conditions and measures to reduce and limit discharges, atmospheric emissions and soil release

Waste water must be sent to a dedicated treatment plant or treated with other suitable techniques.

Organizational measures to prevent release from site

Only properly trained and authorized personnel can handle the substance. Substance handling procedures must be well documented and controlled.

Conditions and measures for the domestic sewage treatment plant

Dimensions of wastewater treatment plant: 2000 m³/d (removal rate: 87.4 %)

Conditions and measures for external treatment of waste for disposal

No specific measures. For general conditions and measures, see section 13.

Conditions and measures for external recovery of waste

No specific measures. For general conditions and measures, see section 13.

3. EXPOSURE ESTIMATION AND REFERENCE TO ITS SOURCE

Workers

PROC8a, PROC8b

Exposure assessment (human):

PROC8a

ECETOC TRA model (April 2010 version). Dermal exposure estimates of ECETOC TRA have been linearly corrected for concentration. Local and systemic exposure via inhalation of ECETOC TRA has been linearly scaled based on the concentration.

PROC8b

ECETOC TRA model (April 2010 version). Dermal exposure estimates of ECETOC TRA have been linearly corrected for concentration.

Exposure estimation:

Individual and combined (skin and inhalation) exposure values are below the DNELs (RCR ratios < 1).

Environment

ERC8a, ERC8b

Exposure assessment (environment):

EUSES 2.1.

Exposure estimation:

The predicted exposure concentrations for air, water and soil are lower than the derived PNECs, giving an RCR < 1.

4. GUIDANCE FOR DOWNSTREAM USERS TO ASSESS WHETHER THEY COMPLY WITH THE LIMITS SET BY THE EXPOSURE SCENARIO

Environment:

Under the conditions listed above the process is considered safe. Direct release to water and soil should be avoided, air emissions should be minimised. Other conditions should be considered only when adequate measurements or calculations demonstrate that the RCR remains < 1.

Health:

Under the conditions listed above the process is considered safe. Other conditions should be considered only when adequate measurements or calculations demonstrate that the RCR remains < 1.

Further good practice advice beyond the REACH CSA

Environment: Not applicable

Health: On possible contact with the product (sampling, use, spills, product leaks, cleaning): wear protective clothing. Wear protective gloves and safety goggles. See section 8 for information on appropriate personal protective equipment.

PROFESSIONAL USE

Exposure scenario for professional use in washing and cleaning products, cosmetics and personal care products (PC35, PC39)

1. TITLE

Systematic title based on the use descriptor: SU22 - Professional uses: Generalized use

Processes, activities covered:

Transfer operations from/to large or small containers
Treatment of objects by roller/brush, spray or dip/pour application
Mixing or dilution in batch processes or by hand

Evaluation method:

ECETOC TRA (April 2010), EUSES (v.2.1)

2. OPERATING CONDITIONS AND RISK MANAGEMENT MEASURES

Human Health Exposure/Environmental Exposure:

PC35: PROC8a, 8b, 9, 10, 11, 13, 19 - ERC8a, 8b, 8d, 8e

PC39: PROC13 - ERC8a, 8b, 8d, 8e

Number of sites: > 1

2.1 EXPOSURE SCENARIO CONTROLLING WORKER EXPOSURE FOR PROC8a, PROC8b, PROC9, PROC10, PROC13

Product features

Concentration ≤ 40%
Physical state: liquid

Quantity used

Not applicable

Frequency and duration of use/exposure

Duration of exposure per day: 8h (full shift, indoors and outdoors)
Duration of exposure per year: 230 days

Human factors not influenced by risk management

Breathing volume in the conditions of use: 10 m³/8h-day (light activity)
Body weight: 70kg (worker)

Other operational conditions affecting worker exposure

Internal use
Use at room temperature

Technical conditions and measures to control dispersion from source to the worker

No special measures are required.

Organizational measures to prevent/limit releases, dispersion and exposure

Only properly trained and authorized personnel can handle the substance. Substance handling procedures must be well documented and controlled.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection:

PROC8b, PROC9: concentration ≤ 40 %: no RMM required.

PROC8a, PROC13: > 25 % - ≤ 40 %: gloves (90 % efficiency) are required as described in section 8.

PROC10: < 5 % (indoor and outdoor environment): No RMMs required

> 5 - ≤ 40 % (indoor and outdoor environment): gloves (90 % efficiency) are required as described in section 8.

Wear safety goggles as described in section 8.

Wear protective clothing as described in section 8.

2.2 EXPOSURE SCENARIO CONTROLLING WORKER EXPOSURE FOR PROC11

Product features

Concentration $\leq 40\%$

Physical state: liquid

Quantity used

Not applicable

Frequency and duration of use/exposure

Duration of exposure per day: 8h (full shift, indoors and outdoors)

Duration of exposure per year: 230 days

Human factors not influenced by risk management

Breathing volume in the conditions of use: 10 m³/8h-day (light activity)

Body weight: 70kg (worker)

Other operational conditions affecting worker exposure

Internal use

Use at room temperature

Technical conditions and measures to control dispersion from source to the worker

No special measures are required.

Organizational measures to prevent/limit releases, dispersion and exposure

Only properly trained and authorized personnel can handle the substance. Substance handling procedures must be well documented and controlled.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection:

$\leq 5\%$ (indoor and outdoor environment): Respiratory protection (95 % efficiency) required as described in section 8.

$> 5\% - \leq 40\%$ (indoor and outdoor environment): Respiratory protection (95 % efficiency) and gloves (90 % efficiency) required as described in section 8.

Wear safety goggles as described in section 8.

Wear protective clothing as described in section 8.

2.3 EXPOSURE SCENARIO CONTROLLING WORKER EXPOSURE FOR PROC19

Product features

Concentration $\leq 40\%$

Physical state: liquid

Quantity used

Not applicable

Frequency and duration of use/exposure

Duration of exposure per day (concentration $\leq 25\%$): 8 h (indoor and outdoor)

Duration of exposure per day (concentration $>25\% - \leq 40\%$): 4 hours (indoors and outdoors)

Duration of exposure per year: 230 days

Human factors not influenced by risk management

Breathing volume in the conditions of use: 10 m³/8h-day (light activity)

Body weight: 70kg (worker)

Other operational conditions affecting worker exposure

Internal use

Use at room temperature

Technical conditions and measures to control dispersion from source to the worker

No special measures are required.

Organizational measures to prevent/limit releases, dispersion and exposure

Only properly trained and authorized personnel can handle the substance. Substance handling procedures must be well documented and controlled.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection:

> 1 % (indoor): gloves (90 % efficiency) are required as described in section 8.

> 5% - 40% (outdoors): gloves (90 % efficiency) are required as described in section 8..

Wear safety goggles as described in section 8.

Wear protective clothing as described in section 8.

2.4 EXPOSURE SCENARIO CONTROLLING ENVIRONMENTAL EXPOSURE FOR ERC8a, ERC8b, ERC8d, ERC8e

Product features

Not relevant

Quantity used

Yearly amount used in the region: the 10% rule applies

ERC8a PC35/PC39: 1,785 t

ERC8b PC35/PC39: 190 t

ERC8d PC35/PC39: 1,775 t

ERC8e PC35/PC39: 190 t

Fraction of main local source: 0.002 (default)

Issue days per site: 365 days/year (default)

Frequency and duration of use

Continuous release: 365 days/year

Environmental factors not influenced by risk management

Local fresh water dilution factor: 10

Receiving surface water flow: 18,000 m³/d

Local seawater dilution factor local: 100

Other operational conditions affecting environmental exposure

No special measures are required.

Technical conditions and measures at process level (source) to prevent release

No special measures are required.

Local technical conditions and measures to reduce and limit discharges, atmospheric emissions and soil release

Waste water must be sent to a dedicated treatment plant or treated with other suitable techniques.

Organizational measures to prevent release from site

Only properly trained and authorized personnel can handle the substance. Substance handling procedures must be well documented and controlled.

Conditions and measures for the domestic sewage treatment plant

Dimensions of wastewater treatment plant: 2000 m³/d (removal rate: 87.4 %)

Conditions and measures for external treatment of waste for disposal

No specific measures. For general conditions and measures, see section 13.

Conditions and measures for external recovery of waste

No specific measures. For general conditions and measures, see section 13.

3. EXPOSURE ESTIMATION AND REFERENCE TO ITS SOURCE

Workers

Exposure assessment (human):

PROC8b, PROC9, PROC11, PROC13

ECETOC TRA model (April 2010 version). Dermal exposure estimates of ECETOC TRA have been corrected for concentration.

PROC8a, PROC10

ECETOC TRA model (April 2010 version). Dermal exposure estimates of ECETOC TRA have been linearly corrected for concentration. Local and systemic exposure via inhalation of ECETOC TRA has been linearly scaled based on the concentration.

PROC19

ECETOC TRA model (April 2010 version). The dermal exposure estimates of ECETOC TRA have been linearly corrected for the concentration and according to the EMFs of CEFIC for the duration of exposure. Local exposure via inhalation of ECETOC TRA has been linearly scaled based on the concentration and in accordance with the CEFIC EMFs for the duration of exposure. Systemic exposure via inhalation has been linearly scaled for the duration of exposure.

Exposure estimation:

Individual and combined (skin and inhalation) exposure values are below the DNELs (RCR ratios < 1).

Environment

ERC8a, ERC8b, ERC8d, ERC8e

Exposure assessment (environment):

EUSES 2.1.

Exposure estimation:

The predicted exposure concentrations for air, water and soil are lower than the derived PNECs, giving an RCR < 1.

4. GUIDANCE FOR DOWNSTREAM USERS TO ASSESS WHETHER THEY COMPLY WITH THE LIMITS SET BY THE EXPOSURE SCENARIO

Environment:

Under the conditions listed above the process is considered safe. Direct release to water and soil should be avoided, air emissions should be minimised. Other conditions should be considered only when adequate measurements or calculations demonstrate that the RCR remains < 1.

Health:

Under the conditions listed above the process is considered safe. Other conditions should be considered only when adequate measurements or calculations demonstrate that the RCR remains < 1.

Further good practice advice beyond the REACH CSA

Environment: Not applicable

Health: On possible contact with the product (sampling, use, spills, product leaks, cleaning): wear protective clothing. Wear protective gloves and safety goggles. See section 8 for information on appropriate personal protective equipment.