

Varnostni list

FASSAFILL EPOXY CLEANER

Varnostni list z dne 12/11/2024 revizija 4

ODDELEK 1: Identifikacija snovi/zmesi in družbe/podjetja

1.1 Identifikator izdelka

Identifikacija pripravka:

Komercialno ime: FASSAFILL EPOXY CLEANER

Komercialna koda: 1292

UFI: 4E8D-0YU0-D91N-UGPE

1.2 Pomembne identificirane uporabe snovi ali zmesi in odsvetovane uporabe

Priporočena uporaba: Čistilo za odstranjevanje ostankov epoksidnih kitov; Samo za profesionalno uporabo

Odsvetovane uporabe: Ni namenjeno za potrošniško uporabo

1.3 Podrobnosti o dobavitelju varnostnega lista

Dobavitelj FASSA Srl

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Fax +39 0422 887509

Odgovorni: laboratorio.spresiano@fassabortolo.it

1.4 Telefonska številka za nujne primere

112 - Center za obveščanje (na voljo 24 ur)

ODDELEK 2: Določitev nevarnosti



2.1 Razvrstitev snovi ali zmesi

Uredba (ES) št. 1272/2008 (CLP)

Eye Irrit. 2 Povzroča hudo draženje oči.

Skin Sens. 1 Lahko povzroči alergijski odziv kože.

Nevarnosti fizikalno-kemijskih lastnosti za zdravje ljudi in za okolje:

Ni drugih tveganj

2.2 Elementi etikete

Uredba (ES) št. 1272/2008 (CLP)

Piktogrami za nevarnost in Opozorilna beseda



Pozor

Stavki o nevarnosti

H317 Lahko povzroči alergijski odziv kože.

H319 Povzroča hudo draženje oči.

Previdnostni stavki

P261 Ne vdihavati dima/plina/meglvice/hlapov/razpršila.

P280 Nadenite si zaščitne rokavice in zaščitite oči/obraz.

P333+P313 Če nastopi draženje kože ali se pojavi izpuščaj: poiščite zdravniško pomoč/oskrbo.

P337+P313 Če draženje oči ne preneha: poiščite zdravniško pomoč/oskrbo.

P362+P364 Sleči kontaminirana oblačila in jih oprati pred ponovno uporabo.

P501 Odstraniti vsebino/posodo v skladu z nacionalnimi predpisi.

Vsebuje:

benzil alkohol

Posebne določbe v skladu s Prilogo XVII uredbe REACH in poznejše spremembe:

Nobeden

2.3 Druge nevarnosti

Označevanje vsebine (Uredba (ES) št. 648/2004): 5 - 15% anionske površinsko aktivne snovi

Ni snovi PBT, vPvB ali endokrinih motilcev v koncentraciji > = 0,1%.

Ni drugih tveganj

ODDELEK 3: Sestava/podatki o sestavinah

3.1 Snovi

ni znano

3.2 Zmesi

Identifikacija pripravka: FASSAFILL EPOXY CLEANER

Nevarne sestavine, skladno z Uredbo CLP in njeno razvrstitvijo:

Količina	Ime	Ident. št.	Razvrstitev	Registracijska številka:
≥15 - <20 %	benzil alkohol	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 Ocena akutne strupenosti: ATE - Oralno: 1200mg/kg tt	01-2119492630-38-xxxx
≥7 - <10 %	kálium-oleát	CAS:143-18-0 EC:205-590-5	Skin Irrit. 2, H315; Eye Irrit. 2, H319	
≥7 - <10 %	1-metoksi-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

ODDELEK 4: Ukrepi za prvo pomoč

4.1 Opis ukrepov za prvo pomoč

V primeru stika s kožo:

Kontaminirana oblačila takoj slecite in jih na varen način odstranite.

V primeru stika s proizvodom in tudi v primeru suma morebitnega stika, dele telesa takoj umijte z veliko količino tekoče vode in milom.

Umijte celotno telo (tuširanje ali kopel).

V primeru stika z očmi:

V primeru stika z očmi dovolj dolgo in z odprtimi očesnimi vekami izpirajte z obilo vode, nato poiščite pomoč zdravnika oftalmologa.

Poškodovano oko zaščitite.

V primeru zaužitja:

Po zaužitju ne izzivati bruhanja, takoj poiskati zdravniško pomoč in pokazati varnostni list in nalepko.

V primeru vdihavanja:

Prizadeto osebo umaknite na svež zrak in pustite počivati na toplem.

4.2 Najpomembnejši simptomi in učinki, akutni in zapozneli

Simptomi in ucinki so taki, kot je pricakovano glede na nevarnosti, kar je prikazano v 2. razdelku.

4.3 Navedba kakršne koli takojšnje medicinske oskrbe in posebnega zdravljenja

V primeru nesreče ali slabega počutja takoj poiščite zdravniško pomoč (če je mogoče, pokažite navodila za uporabo ali varnostni list).

ODDELEK 5: Protipožarni ukrepi

5.1 Sredstva za gašenje

Ustrezna sredstva za gašenje:

Proizvod ni vnetljiv

Sredstva za gašenje, ki se jih iz varnostnih razlogov ne sme uporabljati:

Noben posebej.

5.2 Posebne nevarnosti v zvezi s snovjo ali zmesjo

Pri gorenju nastajajo težki dimni plini.

V primeru požara in/ali eksplozije ne vdihavajte dima.

5.3 Nasvet za gasilce

Uporabiti ustrezne dihalne naprave.

Ločeno zberite kontaminirano vodo, uporabljeno za gašenje požara. Ne je izpustiti v kanalizacijo.

Če je to varno izvedljivo, nepoškodovane vsebnike umaknite iz neposredno ogroženega območja.

ODDELEK 6: Ukrepi o nenamernih izpustih

6.1 Osebnostni ukrepi, zaščitna oprema in postopki v sili

Za neizučeno osebo:

- Nosite osebno varovalno opremo.
- Osebe umaknite na varno mesto.
- Glejte v točki 7 in 8 navedene zaščitne ukrepe.

Za reševalce:

- Nosite osebno varovalno opremo.

6.2 Okoljevarstveni ukrepi

- Preprečite vstop v tla/podtalnico. Preprečite razlitje v površinske vode ali v kanalizacijo.
- V primeru puščanja plina ali razlitja v vodne tokove, tla ali kanalizacijo obvestite pristojne organe.

6.3 Metode in materiali za zadrževanje in čiščenje

- Za zbiranje primeren material: inerten vpojni materiali (npr. pesek, vermikulit).
- Po pobiranju z vodo izperite območje in prizadete materiale.
- Kontaminirano vodo za pranje shranite in odstranite.

6.4 Sklincevanje na druge oddelke

- Glejte tudi naslova 8 in 13

ODDELEK 7: Ravnanje in skladiščenje

7.1 Varnostni ukrepi za varno ravnanje

- Preprečite stik s kožo in očmi, vdihavanje hlapov in megle.
- Prazne vsebnike ne uporabite dokler niso očiščeni.
- Pred postopki prenosa se prepričajte, da v vsebnikih ni ostankov nezdružljivih materialov.

Nasveti o splošni higieni dela:

- Kontaminirana oblačila se mora pred vstopom v jedilnico zamenjati.
- Med delom ne jejte in ne pijte.
- Glejte tudi naslov 8 o priporočeni varovalni opremi.

7.2 Pogoji za varno skladiščenje, vključno z nezdružljivostjo

- Posode hranite tesno zaprte na hladnem in dobro prezračevanem mestu proč od virov toplote.
- Hranite stran od hrane, pijač in krme.

Inkompaktibilne snovi:

- Glejte točko 10.5

Navodila za prostore:

- Primerno zračeni prostori.
- Zaščitite pred zmrzaljo.

7.3 Posebne končne uporabe

Priporočila

- Glejte točko 1.2

Specifične rešitve za industrijski sektor

- Nobena posebna uporaba

ODDELEK 8: Nadzor izpostavljenosti/osebna zaščita

8.1 Parametri nadzora

Seznam sestavin z OEL vrednostmi

benzil alkohol				
CAS: 100-51-6	Tip OPZ	MAK	Nemčija	Dolgotrajna 22 mg/m3 - 5 ppm; Kratkotrajna 44 mg/m3 - 10 ppm Opombe: Inhalable fraction and vapour, Skin
	Tip OPZ	TLV	Češka	Dolgotrajna 40 mg/m3 - 8.88 ppm; Kratkotrajna 80 mg/m3 - 17.76 ppm
	Tip OPZ	SUVA	Švicar	Dolgotrajna 22 mg/m3 - 5 ppm
	Tip OPZ	AGW	Nemčija	Dolgotrajna 22 mg/m3 - 5 ppm; Kratkotrajna 44 mg/m3 - 10 ppm Opombe: Inhalable fraction and vapour
	Tip OPZ	NDS	Poljska	Dolgotrajna 240 mg/m3
	Tip OPZ	MV	Slovenija	Dolgotrajna 22 mg/m3 - 5 ppm; Kratkotrajna 44 mg/m3 - 10 ppm Opombe: Skin
1-metoksi-2-propanol				
CAS: 107-98-2	Tip OPZ	ACGIH		Dolgotrajna 50 ppm; Kratkotrajna 100 ppm Opombe: A4 - Eye and URT irr
	Tip OPZ	EU		Dolgotrajna 375 mg/m3 - 100 ppm; Kratkotrajna 568 mg/m3 - 150 ppm

Opombe: Skin

Tip OPZ	MAK	Avstrija	Dolgotrajna 187 mg/m ³ - 50 ppm; Kratkotrajna 187 mg/m ³ - 50 ppm
Tip OPZ	MAK	Nemčija	Dolgotrajna 370 mg/m ³ - 100 ppm; Kratkotrajna 740 mg/m ³ - 200 ppm
Tip OPZ	VLEP	Belgija	Dolgotrajna 184 mg/m ³ - 50 ppm; Kratkotrajna 369 mg/m ³ - 100 ppm Opombe: 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 OPZ	VLEP	Francija	Dolgotrajna 188 mg/m ³ - 50 ppm; Kratkotrajna 375 mg/m ³ - 100 ppm
Tip OPZ	VLEP	Italija	Dolgotrajna 375 mg/m ³ - 100 ppm; Kratkotrajna 568 mg/m ³ - 150 ppm
Tip OPZ	VLEP	Romunija	Dolgotrajna 375 mg/m ³ - 100 ppm; Kratkotrajna 568 mg/m ³ - 150 ppm
Tip OPZ	TLV	Češka	Dolgotrajna 270 mg/m ³ - 72.09 ppm; Kratkotrajna 550 mg/m ³ - 146.85 ppm Opombe: Skin
Tip OPZ	VLA	Španija	Dolgotrajna 375 mg/m ³ - 100 ppm; Kratkotrajna 568 mg/m ³ - 150 ppm Opombe: Skin
Tip OPZ	ÁK	Madžarska	Dolgotrajna 375 mg/m ³ ; Kratkotrajna 568 mg/m ³
Tip OPZ	VLE	Portugalska	Dolgotrajna 375 mg/m ³ - 100 ppm; Kratkotrajna 568 mg/m ³ - 150 ppm
Tip OPZ	SUVA	Švicar	Dolgotrajna 360 mg/m ³ - 100 ppm; Kratkotrajna 720 mg/m ³ - 200 ppm
Tip OPZ	WEL	U.K.	Dolgotrajna 375 mg/m ³ - 100 ppm; Kratkotrajna 560 mg/m ³ - 150 ppm
Tip OPZ	GVI	Hrvaška	Dolgotrajna 375 mg/m ³ - 100 ppm; Kratkotrajna 568 mg/m ³ - 150 ppm
Tip OPZ	AGW	Nemčija	Dolgotrajna 370 mg/m ³ - 100 ppm; Kratkotrajna 740 mg/m ³ - 200 ppm
Tip OPZ	NDS	Nizozemska	Dolgotrajna 375 mg/m ³ ; Kratkotrajna 563 mg/m ³
Tip OPZ	NDS	Poljska	Dolgotrajna 180 mg/m ³ ; Kratkotrajna 360 mg/m ³ Opombe: Skin
Tip OPZ	MV	Slovenija	Dolgotrajna 375 mg/m ³ - 100 ppm; Kratkotrajna 568 mg/m ³ - 150 ppm Opombe: Skin

Mejna vrednost izpostavljenosti po PNEC

benzil alkohol

CAS: 100-51-6

Način izpostavitve: Sladka voda; PNEC Omejite: 1 mg/l

Način izpostavitve: Morska voda; PNEC Omejite: 0.1 mg/l

Način izpostavitve: Mikroorganizmi v čistilnih napravah (STP); PNEC Omejite: 39 mg/l

Način izpostavitve: Sladkovodni sedimenti; PNEC Omejite: 5.27 mg/kg

Način izpostavitve: Morski sedimenti; PNEC Omejite: 0.527 mg/kg

Način izpostavitve: Tla (kmetijska); PNEC Omejite: 0.456 mg/kg

1-metoksi-2-propanol

CAS: 107-98-2

Način izpostavitve: Morska voda; PNEC Omejite: 1 mg/l

Način izpostavitve: Sladka voda; PNEC Omejite: 10 mg/l

Način izpostavitve: Mikroorganizmi v čistilnih napravah (STP); PNEC Omejite: 100 mg/l

Način izpostavitve: Morski sedimenti; PNEC Omejite: 5.2 mg/kg

Način izpostavitve: Sladkovodni sedimenti; PNEC Omejite: 52.3 mg/kg

Način izpostavitve: Tla (kmetijska); PNEC Omejite: 4.59 mg/kg

Izpeljane vrednosti brez učinka. (DNEL)

benzil alkohol

CAS: 100-51-6

Način izpostavitve: Z vdihavanjem, človek; Pogostost izpostavitve: Kratkotrajna, sistemski učinek
Strokovni delavec: 110 mg/m³; Uporabnik: 27 mg/m³

Način izpostavitve: Z vdihavanjem, človek; Pogostost izpostavitve: Dolgotrajna, sistemski učinek
Strokovni delavec: 22 mg/m³; Uporabnik: 5.4 mg/m³

Način izpostavitve: Dermalno, človek; Pogostost izpostavitve: Kratkotrajna, sistemski učinek
Strokovni delavec: 40 mg/kg; Uporabnik: 20 mg/kg

Način izpostavitve: Dermalno, človek; Pogostost izpostavitve: Dolgotrajna, sistemski učinek
Strokovni delavec: 8 mg/kg; Uporabnik: 4 mg/kg

Način izpostavitve: Oralno, človek; Pogostost izpostavitve: Kratkotrajna, sistemski učinek
Uporabnik: 20 mg/kg

Način izpostavitve: Oralno, človek; Pogostost izpostavitve: Dolgotrajna, sistemski učinek

Uporabnik: 4 mg/kg

1-metoksi-2-propanol

CAS: 107-98-2 Način izpostavitve: Z vdihavanjem, človek; Pogostost izpostavitve: Dolgotrajna, sistemski učinek
Strokovni delavec: 369 mg/m³; Uporabnik: 43.9 mg/m³

Način izpostavitve: Z vdihavanjem, človek; Pogostost izpostavitve: Kratkotrajna, lokalni učinek
Strokovni delavec: 553.5 mg/m³

Način izpostavitve: Z vdihavanjem, človek; Pogostost izpostavitve: Kratkotrajna, sistemski učinek
Strokovni delavec: 553.5 mg/m³

Način izpostavitve: Dermalno, človek; Pogostost izpostavitve: Dolgotrajna, sistemski učinek
Strokovni delavec: 183 mg/kg; Uporabnik: 78 mg/kg

Način izpostavitve: Oralno, človek; Pogostost izpostavitve: Dolgotrajna, sistemski učinek
Uporabnik: 3.3 mg/kg

8.2 Nadzor izpostavljenosti

Poskrbite za ustrezno prezračevanje. Kadar je to izvedljivo, je to mogoče doseči z uporabo nadomestnega prezračevanja in dobrim splošnim vsesavanjem.

Zaščita oči:

Očala s stranskimi varovali (EN 166).

Zaščita kože:

Uporabljajte oblačila, primerna za popolno zaščito kože glede na dejavnost in izpostavljenost (EN 14605/EN 13982), npr. delovni kombinezon, predpasnik, zaščitna obutev, primerna oblačila.

Zaščita rok:

Ni materiala ali kombinacije materialov za rokavice, ki bi lahko zagotovili neomejeno odpornost na katero koli kombinacijo kemikalij ali proizvodov.

Za daljše ali večkratno rokovanje uporabite rokavice, odporne na kemikalije.

Ustrezne rokavice tipa (EN 374/EN 16523); Butil kavčuk (butil guma): debelina ≥ 0.4 mm; permeacijski čas ≥ 480 min. NBR (Nitrilkaučuk): debelina ≥ 0.4 mm; permeacijski čas ≥ 480 min

Izbira primernih rokavic ni odvisna samo od materiala, temveč tudi od drugih kakovostnih lastnosti, ki se razlikujejo od enega do drugega proizvajalca, in od načinov ter časov uporabe mešanice.

Zaščita dihalnih poti:

Če so delavci izpostavljeni koncentracijam nad mejnimi vrednostmi izpostavljenosti, morajo uporabljati primerne, certificirane dihalne aparate.

Kombinirana filtrirna naprava (EN 14387).

Nadzor izpostavljenosti okolja:

Glejte točko 6.2

Higienski in tehnični ukrepi

Glejte poglavje 7.

ODDELEK 9: Fizikalne in kemijske lastnosti

9.1 Podatki o osnovnih fizikalnih in kemijskih lastnostih

fizično stanje: Tekoče

Izgled: Tekoče

Barva: svetlo rumen

Vonj: značilnost

Prag vonja: N.D.

Tališče/ledišče: N.D.

Vrelišče ali začetno vrelišče in območje vrelišča: N.D.

Vnetljivost: ni gorljivo; ; Notranja evalvacija

Spodnja in zgornja meja eksplozivnosti: N.D.

Plamenišče: $> 93^{\circ}\text{C}$ (Notranja evalvacija)

Temperatura samovžiga: N.D.

Temperatura razgradnje: N.D.

pH: $\geq 10.90 \leq 11.90$ (Interna metoda)

Kinematična viskoznost: ≤ 20.5 mm²/s (40 °C)

Gostota in/ali relativna gostota: 1.01 ± 0.01 kg/l (Interna metoda)

Relativna parna gostota: N.D.

Parni tlak: N.D.

Topnost v vodi: mešljiv v vseh razmerjih

Topnost v olju: Podatki niso na voljo

Porazdelitveni koeficient n-oktanol/voda (logaritemska vrednost): ni znano

Lastnosti delcev:

Velikost delcev: ni znano

9.2 Drugi podatki

Prevodnost: N.D.

Eksplozivne lastnosti: N.D.

Oksidativne lastnosti: N.D.

Hitrost izparevanja: ni znano

HOS % (2010/75/EU): 28.90

ODDELEK 10: Obstočnost in reaktivnost

10.1 Reaktivnost

Stabilna v normalnih pogojih

10.2 Kemijska stabilnost

Stabilna v normalnih pogojih

10.3 Možnost poteka nevarnih reakcij

Nobeden.

10.4 Pogoji, ki se jim je treba izogniti

Izogibajte se bližine toplotnih virov.

10.5 Nezdružljivi materiali

Nobeno posebej.

10.6 Nevarni produkti razgradnje

V primeru pravilnega skladiščenja in ravnanja ne pride do razvoja nevarnih produktov razgradnje.

Glejte točko 5.2

ODDELEK 11: Toksikološki podatki

11.1 Podatki o razredih nevarnosti, kakor so opredeljeni v Uredbi (ES) št. 1272/2008

Toksikološki podatki izdelka:

a) akutna strupenost	Ni klasificirano Na podlagi razpoložljivih podatkov merila za razvrstitev niso izpolnjena.
b) jedkost za kožo/draženje kože	Ni klasificirano Na podlagi razpoložljivih podatkov merila za razvrstitev niso izpolnjena.
c) resne okvare oči/draženje	Proizvod je razvrščen: Eye Irrit. 2(H319)
d) preobčutljivost pri vdihavanju in preobčutljivost kože	Proizvod je razvrščen: Skin Sens. 1(H317)
e) mutagenost za zarodne celice	Ni klasificirano Na podlagi razpoložljivih podatkov merila za razvrstitev niso izpolnjena.
f) rakotvornost	Ni klasificirano Na podlagi razpoložljivih podatkov merila za razvrstitev niso izpolnjena.
g) strupenost za razmnoževanje	Ni klasificirano Na podlagi razpoložljivih podatkov merila za razvrstitev niso izpolnjena.
h) STOT - enkratna izpostavljenost	Ni klasificirano Na podlagi razpoložljivih podatkov merila za razvrstitev niso izpolnjena.
i) STOT - ponavljajoča se izpostavljenost	Ni klasificirano Na podlagi razpoložljivih podatkov merila za razvrstitev niso izpolnjena.
j) nevarnost pri vdihavanju	Ni klasificirano Na podlagi razpoložljivih podatkov merila za razvrstitev niso izpolnjena.

Toksikološki podatki glavnih snovi, ki jih najdemo v izdelku:

benzil alkohol

CAS: 100-51-6 a) akutna strupenost ATE - Oralno: 1200 mg/kg tt
LD50 Oralno Podgana 1620 mg/kg

kálium-oleát

CAS: 143-18-0 a) akutna strupenost LD50 Oralno Podgana > 2000 mg/kg

1-metoksi-2-propanol

CAS: 107-98-2 a) akutna strupenost LD50 Oralno Podgana 4016 mg/kg
LD50 Koža Podgana > 2000 mg/kg
LC50 Vdihavanje hlapov Podgana > 7000 ppm 6h

11.2 Podatki o drugih nevarnostih

Lastnosti endokrinih motilcev:

Ni endokrinih motilcev v koncentraciji $\geq 0,1\%$.

ODDELEK 12: Ekološki podatki

Uporabljajte v skladu z dobrimi delovnimi navadami, izogibajte se odlaganju izdelka v okolju.

12.1 Strupenost

Ekotoksikološki podatki:

Ekotoksikoloških lastnosti izdelka

Ni razvrščeno kot nevarno za okolje

Za izdelek ni razpoložljivih podatkov

Seznam sestavin z ekotoksikološkimi lastnostmi

benzil alkohol

- CAS: 100-51-6
- a) akutna strupenost za vodno okolje: LC50 Riba 460 mg/l 96h
 - a) akutna strupenost za vodno okolje: EC50 Vodna bolha 230 mg/l 48h
 - a) akutna strupenost za vodno okolje: EC50 Alge 770 mg/l 72h
 - b) kronična strupenost za vodno okolje: NOEC Vodna bolha 51 mg/l 21d
 - b) kronična strupenost za vodno okolje: NOEC Alge 310 mg/l 72h

kálium-oleát

- CAS: 143-18-0
- a) akutna strupenost za vodno okolje: LC50 Riba > 1 mg/l 96h
 - a) akutna strupenost za vodno okolje: EC50 Vodna bolha > 10 mg/l 48h
 - a) akutna strupenost za vodno okolje: EC50 Alge > 10 mg/l 72h

1-metoksi-2-propanol

- CAS: 107-98-2
- a) akutna strupenost za vodno okolje: LC50 Riba 6812 mg/l 96h
 - a) akutna strupenost za vodno okolje: EC50 Vodna bolha 23300 mg/l 48h
 - a) akutna strupenost za vodno okolje: EC50 Alge > 1000 mg/l 7d

12.2 Obstočnost in razgradljivost

benzil alkohol

CAS: 100-51-6 Hitro razgradljivo

kálium-oleát

CAS: 143-18-0 Hitro razgradljivo

1-metoksi-2-propanol

CAS: 107-98-2 Hitro razgradljivo

12.3 Zmožnost kopičenja v organizmih

ni znano

12.4 Mobilnost v tleh

ni znano

12.5 Rezultati ocene PBT in vPvB

Na podlagi razpoložljivih podatkov, preparat ne vsebuje snovi PBT/vPvB v procentu $\geq 0,1\%$.

12.6 Lastnosti endokrinih motilcev

Ni endokrinih motilcev v koncentraciji $\geq 0,1\%$.

12.7 Drugi škodljivi učinki

ni znano

ODDELEK 13: Odstranjevanje

13.1 Metode ravnanja z odpadki

Če je mogoče, predelajte. Ravnajte se po lokalnih in državnih normah.

Ne dopustite, da pride v kanalizacijo ali vodne poti.

Odstraniti posode, ki jih kontaminira izdelek v skladu z lokalnimi ali nacionalnimi predpisi.

Ko izdelku poteče življenjska doba, ga odstranite v skladu z veljavno zakonodajo.

ODDELEK 14: Podatki o prevozu

Blago ni nevarno smislu normativ o transportu.

14.1 Številka ZN in številka ID

N/A

14.2 Pravilno odpremno ime ZN

ADR-uradno ime blaga: N/A

IATA-uradno ime blaga: N/A

IMDG-uradno ime blaga: N/A

14.3 Razredi nevarnosti prevoza

ADR-Razred: N/A

IATA-razred: N/A

IMDG-razred: N/A

14.4 Skupina embalaže

ADR-embalažna skupina: N/A

IATA-embalažna skupina: N/A

IMDG-embalažna skupina: N/A

14.5 Nevarnosti za okolje

Onesnaževalec morja: Ne

Onesnažuje okolje po: Ne

IMDG-EMS: N/A

14.6 Posebni previdnostni ukrepi za uporabnika

Cestni in železniški transport (ADR-RID):

ADR izvzeto:

ADR-nalepka nevarnosti: N/A

ADR - Identifikacijska številka nevarnosti: N/A

ADR-posebni ukrepi: N/A

ADR-Pravilnik o cestnem prevozu nevarnega blaga:

Zračni transport (IATA):

IATA-potniška letala: N/A

IATA-tovorna letala: N/A

IATA-nalepka: N/A

IATA-dodatne nevarnosti: N/A

IATA-Erg: N/A

IATA-posebni ukrepi: N/A

Morski transport (IMDG):

IMDG-Zlaganje in ravnanje: N/A

IMDG-Segregacija: N/A

IMDG-dodatne nevarnosti: N/A

IMDG-posebni ukrepi: N/A

14.7 Pomorski prevoz v razsutem stanju v skladu z instrumenti IMO

ni znano

ODDELEK 15: Zakonsko predpisani podatki

15.1 Predpisi/zakonodaja o zdravju, varnosti in okolju, specifični za snov ali zmes

Dir. 98/24/ES (Varovanje delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu)

Dir. 2000/39/ES (mejne vrednosti za poklicno izpostavljenost)

Direktiva 2010/75/EU

Uredba (ES) št. 1907/2006 (REACH)

Uredba (ES) št. 1272/2008 (CLP)

Uredba (ES) št. 790/2009 (1. ATP CLP) in (EU) št. 758/2013

Uredba (EU) 2020/878

Uredba (EU) št. 286/2011 (2. ATP CLP)

Uredba (EU) št. 618/2012 (3. ATP CLP)

Uredba (EU) št. 487/2013 (4. ATP CLP)

Uredba (EU) št. 944/2013 (5. ATP CLP)

Uredba (EU) št. 605/2014 (6. ATP CLP)

Uredba (EU) 2015/1221 (7. ATP CLP)

Uredba (EU) 2016/918 (8. ATP CLP)

Uredba (EU) 2016/1179 (9. ATP CLP)

Uredba (EU) 2017/776 (10. ATP CLP)

Uredba (EU) 2018/669 (11. ATP CLP)

Uredba (EU) 2018/1480 (13. ATP CLP)
Uredba (EU) 2019/521 (12. ATP CLP)
Uredba (EU) 2020/217 (14. ATP CLP)
Uredba (EU) 2020/1182 (15. ATP CLP)
Uredba (EU) 2021/643 (16. ATP CLP)
Uredba (EU) 2021/849 (17. ATP CLP)
Uredba (EU) 2022/692 (18. ATP CLP)
Uredba (EU) št. 2023/1434 (19. ATP CLP)
Uredba (EU) št. 2023/1435 (20. ATP CLP)
Uredba (EU) št. 2024/197 (21. ATP CLP)

Omejitve, povezane z izdelkom ali vsebovanimi snovmi, v skladu s Prilogo XVII Uredbe (ES) 1907/2006 (REACH) in poznejše spremembe:

Obmedzenia vo vzťahu s výrobkom: 3
Obmedzenia vo vzťahu s obsiahnutými látkami: 30 (CAS 1589-47-5), 40, 75

Določbe v zvezi z direktivo EU 2012/18 (Seveso III)

Nobena

Uredba (EU) št. 649/2012 (uredba PIC)

Snovi niso navedene

Nemški razred nevarnosti za vodo.

Razred 1: rahlo ogroža vodo.

SVHC snovi:

Na podlagi razpoložljivih podatkov, preparat ne vsebuje snovi SVHC v procentu $\geq 0.1\%$.

15.2 Ocena kemijske varnosti

Ocena kemijske varnosti ni bila opravljena za mešanice

ODDELEK 16: Drugi podatki

Številka	Opis
H226	Vnetljiva tekočina in hlapi.
H302	Zdravju škodljivo pri zaužitju.
H315	Povzroča draženje kože.
H317	Lahko povzroči alergijski odziv kože.
H319	Povzroča hudo draženje oči.
H336	Lahko povzroči zaspanost ali omotico.

Številka	Razred in kategorija nevarnosti	Opis
2.6/3	Flam. Liq. 3	Vnetljiva tekočina, Kategorija 3
3.1/4/Oral	Acute Tox. 4	Akutna strupenost (oralno), Kategorija 4
3.2/2	Skin Irrit. 2	Draženje kože, Kategorija 2
3.3/2	Eye Irrit. 2	Draženje oči, Kategorija 2
3.4.2/1	Skin Sens. 1	Preobčutljivost kože, Kategorija 1
3.4.2/1B	Skin Sens. 1B	Preobčutljivost kože, Kategorija 1B
3.8/3	STOT SE 3	Specifična strupenost za ciljne organe (STOT) – enkratna izpostavljenost STOT enkrat, Kategorija 3

Razvrstitev in postopek, uporabljen za izpeljavo razvrstitve za zmesi v skladu z Uredbo (ES) 1272/2008 [uredba CLP]:

Razvrstitev v skladu z Uredbo (ES) št. 1272/2008 Postopek razvrščanja

Eye Irrit. 2, H319	metoda izračuna
Skin Sens. 1, H317	metoda izračuna

Ta dokument je pripravila pristojna oseba, ki je ustrezno usposobljena
Glavni bibliografski viri:

ECDIN – Informacijska mreža za okoljske podatke za kemikalije – Skupno raziskovalno središče, Komisija Evropskih skupnosti
SAX – NEVARNE LASTNOSTI INDUSTRIJSKIH MATERIALOV – 8. izdaja – Van Nostrand Reinold
Varnostni listi dobaviteljev surovin.

Predstavljene informacije se nanašajo na naše znanje v zgoraj navedenem datumu. Nanašajo se zgolj na omenjeni izdelek in ne predstavljajo garancije za posebno kakovost.
Uporabnik je dolžan preveriti pravilnost in popolnost teh informacij glede na svojo specifično uporabo.
Ta list razveljavlja in nadomešča vsako predhodno izdajo

Legenda okrajšav in kratic, uporabljenih v varnostnem listu:

ACGIH: Ameriška konferenca vladnih industrijskih higienikov
ADR: Evropski sporazum o mednarodnem prevozu nevarnih snovi v cestnem prometu.
ATE: Ocena akutne strupenosti
ATEmix: Ocena akutne strupenosti (Zmesi)
BEI: Biološki indeks izpostavljenosti
CAS: Chemical Abstracts Service (oddelek Ameriškega kemijskega društva).
CAV: Center za zastrupitve
CE: Evropska skupnost
CLP: Razvrščanje, etiketiranje, pakiranje.
CMR: Rakotvorno, mutageno in strupeno za razmnoževanje
COV: Hlapna organska spojina
CSA: Ocena kemijske varnosti
CSR: Poročilo o kemijski varnosti
DNEL: Izpeljane vrednosti brez učinka.
EC50: Srednja učinkovita koncentracija
ECHA: Evropska agencija za kemikalije
EINECS: Evropski seznam obstoječih snovi.
ES: Scenarij izpostavljenosti
GefStoffVO: Odlok o nevarnih snoveh, Nemčija.
GHS: Globalno poenoten sistem razvrščanja in označevanja nevarnih kemikalij.
IARC: Mednarodna agencija za raziskovanje raka
IATA: Mednarodno združenje za zračni transport.
IC50: Srednja inhibitorna koncentracija
IMDG: Mednarodni kodeks za prevoz nevarnega blaga po morju
LC50: Letalna koncentracija za 50 odstotkov testne populacije.
LD50: Letalna doza za 50 odstotkov testne populacije.
LDLo: Najnižja smrtna doza
N.A.: Se ne uporablja
N/A: Se ne uporablja
N/D: Ni opredeljeno/Ni razpoložljiv
N.D.: Ni razpoložljiv
NIOSH: Nacionalni inštitut za varnost in zdravje pri delu
NOAEL: Raven brez opaznih negativnih vplivov
OSHA: Upravljanje varnosti in zdravja pri delu
PBT: Obstojne, se kopičijo v organizmih in so strupene
PGK: Navodila za embalažo nevarnih snovi
PNEC: Predvidena koncentracija brez učinka.
PSG: Potniki
RID: Pravilnik o mednarodnem prevozu nevarnega blaga po železnici.
STEL: Meja za kratkotrajno izpostavljenost.
STOT: Specifično strupeno za ciljne organe.
TLV: Mejna vrednost izpostavljenosti.
TLV-TWA: Mejna vrednost izpostavljenosti v časovnem obdobju po 8 ur dnevno (ACGIH standard).
vPvB: Telo obstojno, se zelo lahko kopiči v organizmih.
WGK: Nemški razred nevarnosti za vodo.

Odstavki spremenjeni od prejšnje revizije:

- ODDELEK 2: Določitev nevarnosti
- ODDELEK 3: Sestava/podatki o sestavinah
- ODDELEK 8: Nadzor izpostavljenosti/osebna zaščita
- ODDELEK 9: Fizikalne in kemijske lastnosti
- ODDELEK 11: Toksikološki podatki
- ODDELEK 12: Ekološki podatki
- ODDELEK 16: Drugi podatki

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: ≥ 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 - PROC10

Covered use descriptors

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

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: ≥ 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.

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 ESVOC 5 (related to ERC4)

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

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

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

PC18: PROC7, 8a, 8b, 9, 10, 13 spERC ESVOC 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 ESVOC 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 ESVOC 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 ≤ 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 ≤ 40 %: no RMM required.

PROC8a: > 25 % - ≤ 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.