

**AQUAZIP BARRIER PRIMER**

Varnostni list z dne 30/07/2025 revizija 3

**ODDELEK 1: Identifikacija snovi/zmesi in družbe/podjetja****1.1 Identifikator izdelka**

Identifikacija pripravka:

Komerzialno ime: AQUAZIP BARRIER PRIMER

Komerzialna koda: 1322

UFI: 52VF-R5JX-S0EX-XN0K

**1.2 Pomembne identificirane uporabe snovi ali zmesi in odsvetovane uporabe**

Priporočena uporaba: Primer na osnovi sintetičnih smol; Samo za profesionalno uporabo

Odsvetovane uporabe: Ni namenjeno za potrošniško uporabo

**1.3 Podrobnosti o dobavitelju varnostnega lista**

Dobavitelj FASSA Srl

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

Tel. +39 0422 7222

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)**

Flam. Liq. 3	Vnetljiva tekočina in hlapi.
STOT SE 3	Lahko povzroči draženje dihalnih poti.
STOT SE 3	Lahko povzroči zaspanost ali omotico.
Aquatic Chronic 2	Strupeno za vodne organizme, z dolgotrajnimi učinki.

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**

H226	Vnetljiva tekočina in hlapi.
H335	Lahko povzroči draženje dihalnih poti.
H336	Lahko povzroči zaspanost ali omotico.
H411	Strupeno za vodne organizme, z dolgotrajnimi učinki.

**Previdnostni stavki**

P210	Hraniti ločeno od vročine, vročih površin, isker, odprtega ognja in drugih virov vžiga. Kajenje prepovedano.
P261	Ne vdihavati dima/plina/meglvice/hlapov/razpršila.
P273	Preprečiti sproščanje v okolje.
P280	Nadenite si zaščitne rokavice/obleke.
P312	Ob slabem počutju pokličite CENTER ZA ZASTRUPITVE/zdravnika.

Posebne oznake:

EUH066 Ponavljajoča izpostavljenost lahko povzroči nastanek suhe ali razpokane kože.

Vsebuje:

Ogljikovodiki, C9, aromatik  
2-metoksi-1-metiletil acetat

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

Nobeden

2.3 Druge nevarnosti

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: AQUAZIP BARRIER PRIMER

Nevarne sestavine, skladno z Uredbo CLP in njeno razvrstitvijo:

Količina	Ime	Ident. št.	Razvrstitev	Registracijska številka:
≥40 - <50 %	Ogljikovodiki, C9, aromatik	EC:918-668-5	Flam. Liq. 3, H226; Asp. Tox. 1, H304; STOT SE 3, H335; STOT SE 3, H336; Aquatic Chronic 2, H411, EUH066	01-2119455851-35-xxxx
≥20 - <25 %	2-metoksi-1-metiletil acetat	CAS:108-65-6 EC:203-603-9 Index:607-195-00-7	Flam. Liq. 3, H226; STOT SE 3, H336	01-2119475791-29-xxxx
≥0.05 - <0.1 %	ksilen	CAS:1330-20-7 EC:215-535-7 Index:601-022-00-9	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 3, H412	01-2119488216-32-xxxx
Ocena akutne strupenosti: ATE - Dermalno: 1100mg/kg tt ATE - Vdihavanje (Hlapi): 11mg/l				

Opomba: kakršni koli podatki v stolpcu št. ES, ki se začnejo z „9“, so EC # Provisional List Number (začasna številka seznama), ki jo predloži ECHA do objave uradnega evropskega seznama snovi. Naslednja snov je identificirana s številko CAS tako v državah, za katere ne veljajo Uredbe REACH, in v uredbah, ki še niso posodobljene z novimi nomenklaturami ogljikovodikovih topil. Ogljikovodiki, C9, aromatik: CAS 64742-95-6.

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:

Če pride v oči, takoj izpirati z obilo vode in poiskati zdravniško pomoč.

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.  
Če pride do zaužitja, takoj poiskati zdravniško pomoč in pokazati embalažo ali etiketo.

4.2 Najpomembnejši simptomi in učinki, akutni in zapozneli

Simptomi in učinki so taki, kot je pričakovano 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

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## **ODDELEK 5: Protipožarni ukrepi**

### **5.1 Sredstva za gašenje**

Ustrezna sredstva za gašenje:

CO<sub>2</sub>, gasilni aparat na prah, pena, pršenje z vodo.

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

Vodni curki

### **5.2 Posebne nevarnosti v zvezi s snovjo ali zmesjo**

Pri gorenju nastajajo težki dimni plini.

Ne vdihavati pline, ki nastanejo pri eksploziji in/ali gorenju (ogljikov monoksid in ogljikov dioksid, dušikovi oksidi).

### **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.

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## **ODDELEK 6: Ukrepi o nenamernih izpustih**

### **6.1 Osebni varnostni ukrepi, zaščitna oprema in postopki v sili**

**Za neizučeno osebo:**

Nosite osebno varovalno opremo.

Odstranite vse vire vžiga.

V primeru izpostavljenosti hlapom/prahu/aerosolom nosite dihalne aparate.

Omogočite primerno zračenje.

Uporabite ustrezno zaščito dihal.

Glejte v oddelku 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 Sklizevanje na druge oddelke**

Glejte tudi naslova 8 in 13

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## **ODDELEK 7: Ravnanje in skladiščenje**

### **7.1 Varnostni ukrepi za varno ravnanje**

Preprečite stik s kožo in očmi, vdihavanje hlapov in megle.

Uporabite lokaliziran sistem prezračevanja.

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 oddelek 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 daleč od prostih plamenov, isker in virov toplote. Izogibajte se neposredni izpostavitvi soncu.

Hranite stran od hrane, pijač in krme.

Inkompaktibilne snovi:

Glejte točko 10.5

Navodila za prostore:

Hladni in primerno zračeni.

### **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

#### Mejne vrednosti za poklicno izpostavljenost

Ogljikovodiki, C9, aromatik

Tip OPZ ACGIH Dolgotrajna 100 mg/m<sup>3</sup> - 19 ppm

2-metoksi-1-metiletil acetat

CAS: 108-65-6 Tip OPZ EU Dolgotrajna 275 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 550 mg/m<sup>3</sup> - 100 ppm  
Opombe: Skin

Tip OPZ MAK Avstrija Dolgotrajna 275 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 550 mg/m<sup>3</sup> - 100 ppm  
Opombe: Skin

Tip OPZ MAK Nemčija Dolgotrajna 270 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 270 mg/m<sup>3</sup> - 50 ppm

Tip OPZ VLEP Belgija Dolgotrajna 275 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 550 mg/m<sup>3</sup> - 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 275 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 550 mg/m<sup>3</sup> - 100 ppm  
Opombe: Skin

Tip OPZ VLEP Italija Dolgotrajna 275 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 550 mg/m<sup>3</sup> - 100 ppm  
Opombe: Skin

Tip OPZ VLEP Romunija Dolgotrajna 275 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 550 mg/m<sup>3</sup> - 100 ppm

Tip OPZ TLV Bolgarija Dolgotrajna 275 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 550 mg/m<sup>3</sup> - 100 ppm  
Opombe: Skin

Tip OPZ TLV Češka Dolgotrajna 270 mg/m<sup>3</sup> - 49.14 ppm; Kratkotrajna 550 mg/m<sup>3</sup> - 10.01 ppm  
Opombe: Skin

Tip OPZ VLA Španija Dolgotrajna 275 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 550 mg/m<sup>3</sup> - 100 ppm  
Opombe: Skin

Tip OPZ ÁK Madžarska Dolgotrajna 275 mg/m<sup>3</sup>; Kratkotrajna 550 mg/m<sup>3</sup>

Tip OPZ MAC Nizozemska Dolgotrajna 550 mg/m<sup>3</sup> - 100 ppm

Tip OPZ VLE Portugalska Dolgotrajna 275 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 550 mg/m<sup>3</sup> - 100 ppm  
Opombe: Skin

Tip OPZ SUVA Švicar Dolgotrajna 275 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 275 mg/m<sup>3</sup> - 50 ppm

Tip OPZ WEL U.K. Dolgotrajna 274 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 548 mg/m<sup>3</sup> - 100 ppm  
Opombe: Skin

Tip OPZ GVI Hrvaška Dolgotrajna 275 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 550 mg/m<sup>3</sup> - 100 ppm  
Opombe: Skin

Tip OPZ AGW Nemčija Dolgotrajna 270 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 270 mg/m<sup>3</sup> - 50 ppm

Tip OPZ NDS Poljska Dolgotrajna 260 mg/m<sup>3</sup>; Kratkotrajna 520 mg/m<sup>3</sup>  
Opombe: Skin

Tip OPZ MV Slovenija Dolgotrajna 275 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 550 mg/m<sup>3</sup> - 100 ppm  
Opombe: Skin

Tip OPZ IPRV Litva Dolgotrajna 250 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 400 mg/m<sup>3</sup> - 75 ppm  
Opombe: Skin

Tip OPZ RV Latvija Dolgotrajna 275 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 550 mg/m<sup>3</sup> - 100 ppm  
Opombe: Skin

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CAS: 1330-20-7 Tip OPZ ACGIH Dolgotrajna 20 ppm  
Opombe: A4, BEI - URT and eye irr, CNS impair

Tip OPZ EU Dolgotrajna 221 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 442 mg/m<sup>3</sup> - 100 ppm  
Opombe: Skin

Tip OPZ MAK Avstrija Dolgotrajna 221 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 442 mg/m<sup>3</sup> - 100 ppm

Tip OPZ MAK Nemčija Dolgotrajna 220 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 440 mg/m<sup>3</sup> - 100 ppm  
Opombe: Skin

Tip OPZ VLEP Belgija Dolgotrajna 221 mg/m<sup>3</sup> - 50 ppm; Kratkotrajna 442 mg/m<sup>3</sup> - 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 221 mg/m <sup>3</sup> - 50 ppm; Kratkotrajna 442 mg/m <sup>3</sup> - 100 ppm Opombe: Skin
Tip OPZ	VLEP	Italija	Dolgotrajna 221 mg/m <sup>3</sup> - 50 ppm; Kratkotrajna 442 mg/m <sup>3</sup> - 100 ppm Opombe: Skin
Tip OPZ	VLEP	Romunija	Dolgotrajna 221 mg/m <sup>3</sup> - 50 ppm; Kratkotrajna 442 mg/m <sup>3</sup> - 100 ppm
Tip OPZ	TLV	Bolgarija	Dolgotrajna 221 mg/m <sup>3</sup> - 50 ppm; Kratkotrajna 442 mg/m <sup>3</sup> - 100 ppm Opombe: Skin
Tip OPZ	TLV	Češka	Dolgotrajna 200 mg/m <sup>3</sup> - 45.4 ppm; Kratkotrajna 400 mg/m <sup>3</sup> - 90.8 ppm Opombe: Skin
Tip OPZ	VLA	Španija	Dolgotrajna 221 mg/m <sup>3</sup> - 50 ppm; Kratkotrajna 442 mg/m <sup>3</sup> - 100 ppm
Tip OPZ	ÁK	Madžarska	Dolgotrajna 221 mg/m <sup>3</sup> ; Kratkotrajna 442 mg/m <sup>3</sup> Opombe: Skin
Tip OPZ	MAC	Nizozemska	Dolgotrajna 210 mg/m <sup>3</sup> - 47.5 ppm; Kratkotrajna 442 mg/m <sup>3</sup> - 100 ppm Opombe: Skin
Tip OPZ	VLE	Portugalska	Dolgotrajna 221 mg/m <sup>3</sup> - 50 ppm; Kratkotrajna 442 mg/m <sup>3</sup> - 100 ppm Opombe: Skin
Tip OPZ	SUVA	Švicar	Dolgotrajna 220 mg/m <sup>3</sup> - 50 ppm; Kratkotrajna 440 mg/m <sup>3</sup> - 100 ppm
Tip OPZ	WEL	U.K.	Dolgotrajna 220 mg/m <sup>3</sup> - 50 ppm; Kratkotrajna 441 mg/m <sup>3</sup> - 100 ppm Opombe: Skin
Tip OPZ	GVI	Hrvaška	Dolgotrajna 221 mg/m <sup>3</sup> - 50 ppm; Kratkotrajna 442 mg/m <sup>3</sup> - 100 ppm Opombe: Skin
Tip OPZ	AGW	Nemčija	Dolgotrajna 220 mg/m <sup>3</sup> - 50 ppm; Kratkotrajna 440 mg/m <sup>3</sup> - 100 ppm Opombe: Skin
Tip OPZ	NDS	Poljska	Dolgotrajna 100 mg/m <sup>3</sup> ; Kratkotrajna 200 mg/m <sup>3</sup> Opombe: Skin
Tip OPZ	MV	Slovenija	Dolgotrajna 221 mg/m <sup>3</sup> - 50 ppm; Kratkotrajna 442 mg/m <sup>3</sup> - 100 ppm Opombe: Skin
Tip OPZ	IPRV	Litva	Dolgotrajna 221 mg/m <sup>3</sup> - 50 ppm; Kratkotrajna 442 mg/m <sup>3</sup> - 100 ppm Opombe: Skin
Tip OPZ	RV	Latvija	Dolgotrajna 221 mg/m <sup>3</sup> - 50 ppm; Kratkotrajna 442 mg/m <sup>3</sup> - 100 ppm Opombe: Skin

## Mejna vrednost izpostavljenosti po PNEC

### 2-metoksi-1-metiletil acetat

CAS: 108-65-6      Način izpostavitve: Sladka voda; PNEC Omejite: 0.635 mg/l  
                             Način izpostavitve: Morska voda; PNEC Omejite: 0.064 mg/l  
                             Način izpostavitve: Mikroorganizmi v čistilnih napravah (STP); PNEC Omejite: 100 mg/l  
                             Način izpostavitve: Sladkovodni sedimenti; PNEC Omejite: 3.29 mg/kg  
                             Način izpostavitve: Morski sedimenti; PNEC Omejite: 0.329 mg/kg  
                             Način izpostavitve: Tla (kmetijska); PNEC Omejite: 0.29 mg/kg

### ksilen

CAS: 1330-20-7      Način izpostavitve: Morska voda; PNEC Omejite: 0.327 mg/l  
                             Način izpostavitve: Sladka voda; PNEC Omejite: 0.327 mg/l  
                             Način izpostavitve: Mikroorganizmi v čistilnih napravah (STP); PNEC Omejite: 6.58 mg/l  
                             Način izpostavitve: Morski sedimenti; PNEC Omejite: 12.46 mg/kg  
                             Način izpostavitve: Sladkovodni sedimenti; PNEC Omejite: 12.46 mg/kg  
                             Način izpostavitve: Tla (kmetijska); PNEC Omejite: 2.31 mg/kg

## Izpeljane vrednosti brez učinka. (DNEL)

### Ogljikovodiki, C9, aromatik

Način izpostavitve: Dermalno, človek; Pogostost izpostavitve: Dolgotrajna, sistemski učinek  
 Strokovni delavec: 25 mg/kg; Uporabnik: 11 mg/kg

Način izpostavitve: Z vdihavanjem, človek; Pogostost izpostavitve: Dolgotrajna, sistemski učinek

Strokovni delavec: 150 mg/m<sup>3</sup>; Uporabnik: 32 mg/m<sup>3</sup>

Način izpostavitve: Oralno, človek; Pogostost izpostavitve: Dolgotrajna, sistemski učinek  
Uporabnik: 11 mg/kg

#### 2-metoksi-1-metiletil acetat

CAS: 108-65-6 Način izpostavitve: Dermalno, človek; Pogostost izpostavitve: Dolgotrajna, sistemski učinek  
Strokovni delavec: 796 mg/kg; Uporabnik: 320 mg/kg

Način izpostavitve: Oralno, človek; Pogostost izpostavitve: Dolgotrajna, sistemski učinek  
Uporabnik: 36 mg/kg

Način izpostavitve: Oralno, človek; Pogostost izpostavitve: Kratkotrajna, sistemski učinek  
Uporabnik: 500 mg/kg

Način izpostavitve: Z vdihavanjem, človek; Pogostost izpostavitve: Dolgotrajna, sistemski učinek  
Strokovni delavec: 275 mg/m<sup>3</sup>; Uporabnik: 33 mg/m<sup>3</sup>

Način izpostavitve: Z vdihavanjem, človek; Pogostost izpostavitve: Kratkotrajna, lokalni učinek  
Strokovni delavec: 550 mg/m<sup>3</sup>

Način izpostavitve: Z vdihavanjem, človek; Pogostost izpostavitve: Dolgotrajna, lokalni učinek  
Uporabnik: 33 mg/m<sup>3</sup>

#### ksilen

CAS: 1330-20-7 Način izpostavitve: Z vdihavanjem, človek; Pogostost izpostavitve: Dolgotrajna, sistemski učinek  
Strokovni delavec: 221 mg/m<sup>3</sup>; Uporabnik: 65.3 mg/m<sup>3</sup>

Način izpostavitve: Z vdihavanjem, človek; Pogostost izpostavitve: Kratkotrajna, sistemski učinek  
Strokovni delavec: 442 mg/m<sup>3</sup>; Uporabnik: 260 mg/m<sup>3</sup>

Način izpostavitve: Z vdihavanjem, človek; Pogostost izpostavitve: Kratkotrajna, lokalni učinek  
Strokovni delavec: 442 mg/m<sup>3</sup>; Uporabnik: 260 mg/m<sup>3</sup>

Način izpostavitve: Z vdihavanjem, človek; Pogostost izpostavitve: Dolgotrajna, lokalni učinek  
Strokovni delavec: 221 mg/m<sup>3</sup>; Uporabnik: 65.3 mg/m<sup>3</sup>

Način izpostavitve: Dermalno, človek; Pogostost izpostavitve: Dolgotrajna, sistemski učinek  
Strokovni delavec: 212 mg/kg; Uporabnik: 125 mg/kg

Način izpostavitve: Oralno, človek; Pogostost izpostavitve: Dolgotrajna, sistemski učinek  
Uporabnik: 12.5 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 16321).

Zaščita kože:

Osebjem naj nosi antistatična oblačila iz naravnih ali sintetičnih vlaken, odpornih na visoke temperature.

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); FKM (Fluórkaučuk): debelina  $\geq 0.4$  mm; permeacijski čas  $\geq 480$  min. NBR (Nitrilkaučuk): debelina  $\geq 0.4$  mm; permeacijski čas  $\geq 480$  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: belkast  
Vonj: po topilu  
Prag vonja: N.D.  
Tališče/ledišče: N.D.  
Vrelišče ali začetno vrelišče in območje vrelišča: N.D.  
Vnetljivost: Proizvod je razvrščen Flam. Liq. 3 H226  
Spodnja in zgornja meja eksplozivnosti: N.D.  
Plamenišče: 52.5 °C (126.5 °F) ( EN ISO 3679 )  
Temperatura samovžiga: N.D.  
Temperatura razgradnje: N.D.  
pH: ni znano ( Ne pride v poštev zaradi narave proizvoda )  
Kinematična viskoznost: > 20.5 mm²/s (40 °C)  
Gostota in/ali relativna gostota: 0.92 ± 0.02 kg/l ( Interna metoda )  
Relativna parna gostota: N.D.  
Parni tlak: N.D.  
Topnost v vodi: Netopno  
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.

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## ODDELEK 10: Obstočnost in reaktivnost

### 10.1 Reaktivnost

Stabilen v normalnih pogojih

### 10.2 Kemijska stabilnost

Stabilen v normalnih pogojih

### 10.3 Možnost poteka nevarnih reakcij

Zaradi toplote ali v primeru požara se lahko sprostijo ogljikovi oksidi in hlapi, ki lahko škodujejo zdravju.

Hraniti ločeno od oksidantov, močno alkalnih in močno kislih snovi, da se izognete eksotermnim reakcijam.

### 10.4 Pogoji, ki se jim je treba izogniti

Izogibajte se bližine toplotnih virov.

### 10.5 Nezdružljivi materiali

Izogibati se stiku z oksidativnimi materiali. Proizvod lahko zagori.

Glejte točko 10.3

### 10.6 Nevarni produkti razgradnje

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

Glejte točko 5.2

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## 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	Ni klasificirano Na podlagi razpoložljivih podatkov merila za razvrstitev niso izpolnjena.
d) preobčutljivost pri vdihavanju in preobčutljivost kože	Ni klasificirano Na podlagi razpoložljivih podatkov merila za razvrstitev niso izpolnjena.
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	Proizvod je razvrščen: STOT SE 3(H335), STOT SE 3(H336)
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:**

Ogljikovodiki, C9, aromatik

a) akutna strupenost	LD50 Oralno Podgana 3492 mg/kg
	LD50 Koža Zajec > 3160 mg/kg
	LC50 Vdihavanje hlapov Podgana > 6193 mg/m <sup>3</sup> 4h

2-metoksi-1-metiletil acetat

CAS: 108-65-6	a) akutna strupenost	LD50 Oralno Podgana > 5000 mg/kg
		LD50 Koža Zajec > 5000 mg/kg
		LC0 Vdihavanje hlapov Podgana > 4345 ppm 6h

ksilen

CAS: 1330-20-7	a) akutna strupenost	ATE - Dermalno: 1100 mg/kg tt
		ATE - Vdihavanje (Hlapi): 11 mg/l
		LD50 Oralno Podgana 3523 mg/kg

#### **11.2 Podatki o drugih nevarnostih**

##### **Lastnosti endokrinih motilcev:**

Ni endokrinih motilcev v koncentraciji > = 0,1%.

## **ODDELEK 12: Ekološki podatki**

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

### **12.1 Strupenost**

Ekotoksikološki podatki:

Strupeno za vodne organizme, z dolgotrajnimi učinki.

#### **Ekotoksikoloških lastnosti izdelka**

Proizvod je razvrščen: Aquatic Chronic 2(H411)

#### **Seznam sestavin z ekotoksikološkimi lastnostmi**

Ogljikovodiki, C9, aromatik

a) akutna strupenost za vodno okolje:	EL50 Vodna bolha 3.2 mg/l 48h
a) akutna strupenost za vodno okolje:	ErL50 Alge 2.9 mg/l 72h
a) akutna strupenost za vodno okolje:	LC50 Riba 9.2 mg/l 96h

2-metoksi-1-metiletil acetat

CAS: 108-65-6	a) akutna strupenost za vodno okolje:	LC50 Riba 134 mg/l 96h
	a) akutna strupenost za vodno okolje:	EC50 Vodna bolha 408 mg/l 48h
	a) akutna strupenost za vodno okolje:	EC50 Alge > 1000 mg/l 96h
	b) kronična strupenost za vodno okolje:	NOEC Riba 47.5 mg/l - 14 d

### **12.2 Obstočnost in razgradljivost**

Ogljikovodiki, C9, aromatik

Hitro razgradljivo

2-metoksi-1-metiletil acetat

CAS: 108-65-6 Hitro razgradljivo

ksilen

CAS: 1330-20-7 Hitro razgradljivo

### **12.3 Zmožnost kopičenja v organizmih**

ksilen

CAS: 1330-20-7 Se ne kopiči v organizmih

### **12.4 Mobilnost v tleh**



**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  $> = 0,1\%$ .

**12.7 Drugi škodljivi učinki**

ni znano

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**ODDELEK 13: Odstranjevanje****13.1 Metode ravnanja z odpadki**

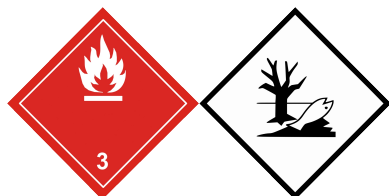
Če je mogoče, predelajte. Pošljite v usposobljena odlagališča ali v zažig pod kontroliranimi pogoji. Ravnajte se po lokalnih in državnih predpisih.

Ne dopustite, da pride v kanalizacijo ali vodne poti.

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

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

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**ODDELEK 14: Podatki o prevozu****14.1 Številka ZN in številka ID**

1263

**14.2 Pravilno odpremno ime ZN**

ADR-uradno ime blaga: BARVA

IATA-uradno ime blaga: PAINT

IMDG-uradno ime blaga: PAINT

**14.3 Razredi nevarnosti prevoza**

ADR-Razred: 3

IATA-razred: 3

IMDG-razred: 3

**14.4 Skupina embalaže**

ADR-embalažna skupina: III

IATA-embalažna skupina: III

IMDG-embalažna skupina: III

**14.5 Nevarnosti za okolje**

Glavna strupena komponenta: Ogljikovodiki, C9, aromatik

Onesnaževalec morja: Da

Onesnažuje okolje po: Da

IMDG-EMS: F-E, S-E

**14.6 Posebni previdnostni ukrepi za uporabnika**

Cestni in železniški transport (ADR-RID):

ADR-nalepka nevarnosti: 3

ADR - Identifikacijska številka nevarnosti: -

ADR-posebni ukrepi: 163 367 650

ADR-Pravilnik o cestnem prevozu nevarnega blaga:

Zračni transport (IATA):

IATA-potniška letala: 355

IATA-tovorna letala: 366

IATA-nalepka: 3

IATA-dodatne nevarnosti: -

IATA-Erg: 3L

IATA-posebni ukrepi: A3 A72 A192

Morski transport (IMDG):

IMDG-Zlaganje in ravnanje: Category A

IMDG-Segregacija: -  
IMDG-dodatne nevarnosti: -  
IMDG-posebni ukrepi: 163 223 367 955

**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) 2023/707  
Uredba (EU) 2023/1434 (19. ATP CLP)  
Uredba (EU) 2023/1435 (20. ATP CLP)  
Uredba (EU) 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:**

- Omejitve v zvezi z izdelkom: 3, 40  
Omejitve v zvezi z vsebovanimi snovmi: 30 (CAS 70657-70-4), 75

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

Kategorija Seveso III v skladu s Prilogo 1, del 1	Mejna vrednost nižje stopnje (v tonah)	Mejna vrednost višje stopnje (v tonah)
izdelek spada v kategorijo: P5c	5000	50000
izdelek spada v kategorijo: E2	200	500

**Uredba (EU) št. 649/2012 (uredba PIC)**

Snovi niso navedene

**Nemški razred nevarnosti za vodo.**

Razred 2: ogroža vodo.

**SVHC snovi:**

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

**Mejna vrednost EU za vsebnost HOS (Direktiva 2004/42/ES)** Kat. A/h: 750 g/l; HOS < 750 g/l

**15.2 Ocena kemijske varnosti**

Ocena kemijske varnosti ni bila opravljena za zmes.

**ODDELEK 16: Drugi podatki**

Številka	Opis
EUH066	Ponavljajoča izpostavljenost lahko povzroči nastanek suhe ali razpokane kože.
H226	Vnetljiva tekočina in hlapi.

H304	Pri zaužitju in vstopu v dihalne poti je lahko smrtno.
H312	Zdravju škodljivo v stiku s kožo.
H315	Povzroča draženje kože.
H319	Povzroča hudo draženje oči.
H332	Zdravju škodljivo pri vdihavanju.
H335	Lahko povzroči draženje dihalnih poti.
H336	Lahko povzroči zaspanost ali omotico.
H373	V primeru dolgotrajnega ali ponovljenega vdihavanja in zaužitja lahko povzroči poškodbe notranjih organov.
H411	Strupeno za vodne organizme, z dolgotrajnimi učinki.
H412	Škodljivo za vodne organizme, z dolgotrajnimi učinki.

Številka	Razred in kategorija nevarnosti	Opis
2.6/3	Flam. Liq. 3	Vnetljiva tekočina, Kategorija 3
3.1/4/Dermal	Acute Tox. 4	Akutna strupenost (dermalno), Kategorija 4
3.1/4/Inhal	Acute Tox. 4	Akutna strupenost (pri vdihavanju), Kategorija 4
3.10/1	Asp. Tox. 1	Nevarnost pri vdihavanju, Kategorija 1
3.2/2	Skin Irrit. 2	Draženje kože, Kategorija 2
3.3/2	Eye Irrit. 2	Draženje oči, Kategorija 2
3.8/3	STOT SE 3	Specifična strupenost za ciljne organe (STOT) – enkratna izpostavljenost STOT enkrat, Kategorija 3
3.9/2	STOT RE 2	Specifična strupenost za ciljne organe (STOT) – ponavljajoča se izpostavljenost, Kategorija 2
4.1/C2	Aquatic Chronic 2	Kronično (dolgotrajno) nevarnost za vodno okolje, Kategorija 2
4.1/C3	Aquatic Chronic 3	Kronično (dolgotrajno) nevarnost za vodno okolje, 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

Flam. Liq. 3, H226	Ocena na podlagi vsebovanih snovi
STOT SE 3, H335	metoda izračuna
STOT SE 3, H336	metoda izračuna
Aquatic Chronic 2, H411	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 zastupitve  
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 1: Identifikacija snovi/zmesi in družbe/podjetja
- 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 14: Podatki o prevozu
- ODDELEK 15: Zakonsko predpisani podatki
- ODDELEK 16: Drugi podatki

# Xylene

## Identification of the exposure scenario

Product name: Xylene

Reach registration number: 01-2119488216-32-XXXX

CAS number: 1330-20-7

EC number: 215-535-7

Review date: 14/02/2022 rev. 3.0

## USE IN COATINGS - INDUSTRIAL USE

### 1. Title of the exposure scenario

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

**Main sector:** SU3 Industrial uses

#### Environment

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

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

#### Worker

##### Process categories:

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

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

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

PROC4 Production of chemicals with the possibility of exposure.

PROC5 Mixing or blending in batch processes

PROC7 Industrial spraying.

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

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

PROC10 Application with rollers or brushes.

PROC13 Treatment of articles by dipping and pouring.

PROC15 Use as laboratory reagent.

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

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

#### Products features

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

Easily biodegradable.

#### Amounts used:

Annual amount per site: 2500 tonnes

#### Frequency and duration of use

Issue days: 300 days/year

#### Additional operating conditions relating to environmental exposure

##### Emission factor - air

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

##### Emission factor - water

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

##### Emission factor - soil

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

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

### **Dilution**

Local fresh water dilution factor: 10

Local seawater dilution factor: 100

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

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

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

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

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

### **Air:**

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

### **Water:**

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

### **Ground:**

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

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

### **Sludge treatment:**

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

### **Waste treatment:**

No waste of the substance is formed during production.

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

### ***Products features***

#### **Form:**

Liquid, vapor pressure 0.5 - 10 kPa at STP

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

### ***Quantities used***

Not applicable.

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

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

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

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

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

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

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

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

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

PROC7 Industrial spraying.

Manual spraying.

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

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

### **Environmental exposure:**

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

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

### 3. Exposure Verification (Health 1)

#### Exposure

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

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

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

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

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

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

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

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

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

## USE IN COATINGS - PROFESSIONAL USE

### 1. Title of the exposure scenario

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

**Main sector:** SU22 Professional uses

#### **Environment**

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

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

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

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

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

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

#### **Worker**

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

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

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

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

PROC4 Production of chemicals with the possibility of exposure.

PROC5 Mixing or blending in batch processes

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

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

PROC10 Application with rollers or brushes.

PROC11 Non-industrial spray application.

PROC13 Treatment of articles by dipping and pouring.

PROC15 Use as laboratory reagent.

PROC19 Manual activities with direct contact.

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

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

#### **Products features**

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

#### **Quantities used**

Annual amount per site: 10 tonnes

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

Issue days: 365 days/year

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

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

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

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

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

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

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

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

##### **Dilution**

Local fresh water dilution factor: 10

Local seawater dilution factor: 100



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

Sewage Treatment Plant Data (STP)

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

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

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

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

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

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

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

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

### ***Products features***

#### **Form:**

Liquid, vapor pressure 0.5 - 10 kPa at STP

#### **Concentration information:**

Includes concentrations up to 100%, unless otherwise indicated.

### ***Quantities used***

Not applicable.

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

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

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

#### **Temperature:**

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

#### **Ventilation Rate:**

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

Assumes a good basic standard of occupational hygiene is implemented.

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

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

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

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

#### **Organizational measures**

Avoid activities with an exposure of more than 4 hours.

Hand Application - Finger Paints, Chalks, Stickers:

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

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

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

PROC10 Application with rollers or brushes.

PROC11 Non-industrial spray application. Outdoor use.

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

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

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

### **Environmental exposure**

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

Maximum allowable site tonnage (Msafe), based on release following total waste water treatment removal: 5969 kg/day

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

#### **Exposure**

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

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

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

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

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

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

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

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

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

## Hydrocarbons, C9, aromatics

### Substance identification

Chemical Name: Hydrocarbons, C9, aromatics

EC number: 918-668-5

Date - Version: 31/05/2017

## USE IN COATINGS. - INDUSTRIAL USE

### SECTION 1: TITLE

#### List of use descriptors

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

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

**End use sector:** SU03

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

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

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

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

#### Contributing scenarios - Environment

Use in coatings

#### Contributing scenarios - Health

Use in coatings

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

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

### SECTION 2: EXPOSURE CONTROLS

#### CONTRIBUTING SCENARIO THAT CONTROLS ENVIRONMENTAL EXPOSURE

##### Product features

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

##### Quantity used

Fraction of EU tonnage used in region 0.1

Regional use tonnage 7600

Fraction of regional tonnage used locally 1

Annual site tonnage 7600

Maximum daily site tonnage 25000

##### Frequency and duration of use

Continuous release - Issue days: 300

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

Local fresh water dilution factor: 10

Local marine water dilution factor: 100

##### Other conditions affecting environmental exposure

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

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

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

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

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

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

Risk from environmental exposure is driven by freshwater sediment.

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

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

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

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

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

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

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

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

Assumed on-site sewage treatment plant flow: 2000

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

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

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

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

## **CONTRIBUTING SCENARIO CONTROLLING WORKER EXPOSURE**

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

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

### ***Physical state***

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

### ***Quantity used***

No limit.

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

Applies to daily exposures of up to 8 hours.

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

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

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

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

No other specific measures identified.

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

No other specific measures identified.

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

Provide extract ventilation in points where emissions occur.

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

No other specific measures identified.

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

Provide extract ventilation in points where emissions occur.

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

Provide extract ventilation in points where emissions occur.

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

Carry out in a vented booth provided with laminar airflow.

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

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

**Material transfers.**

Provide extract ventilation in points where emissions occur.

**Roller, spreader, flow application.**

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

**Enamelling, dipping and pouring.**

Provide extract ventilation in points where emissions occur.

**Laboratory activities.**

No other specific measures identified.

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

Provide material transfer points with extract ventilation.

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

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

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

Provide enhanced general ventilation by mechanical means.

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

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

**Exposure assessment (environment)**

Not available.

**Exposure estimation and reference to its source**

Hydrocarbon Block Method (Petrisk)

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

**Exposure assessment (human)**

Not available.

**Exposure estimation and reference to its source**

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

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

**ENVIRONMENT**

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

**HEALTH**

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

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

**Environment:** Not available

**Health:** Not available

## USE IN COATINGS. - PROFESSIONAL USE

### SECTION 1: TITLE

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

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

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

**End use sector:** SU22

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

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

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

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

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

Use in coatings

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

Use in coatings

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

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

### SECTION 2: EXPOSURE CONTROLS

#### CONTRIBUTING SCENARIO THAT CONTROLS ENVIRONMENTAL EXPOSURE

##### **Product features**

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

##### **Quantity used**

Fraction of EU tonnage used in region 0.1

Regional use tonnage 2200

Fraction of regional tonnage used locally 1

Annual site tonnage 1.1

Maximum daily site tonnage 3

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

Continuous release - Issue days: 365

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

Local fresh water dilution factor: 10

Local marine water dilution factor: 100

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

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

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

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

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

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

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

Risk from environmental exposure is driven by soil.

Wastewater treatment is not required.

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

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

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

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

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

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

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

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

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

Assumed on-site sewage treatment plant flow: 2000

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

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

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

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

## **CONTRIBUTING SCENARIO CONTROLLING WORKER EXPOSURE**

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

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

### **Physical state**

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

### **Quantity used**

No limit.

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

Applies to daily exposures of up to 8 hours.

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

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

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

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

No other specific measures identified.

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

No other specific measures identified.

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

Ensure material transfers are under containment or extract ventilation.

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

No other specific measures identified.

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

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

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

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

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

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

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

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

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

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

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

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

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



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

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

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

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

***Manual spraying. Inside.***

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

***Manual spraying. Outside.***

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

***Manual spraying. Outside.***

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

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

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

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

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

***Laboratory activities.***

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

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

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

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

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

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

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

***Exposure assessment (environment)***

Not available.

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

Hydrocarbon Block Method (Petrisk)

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

***Exposure assessment (human)***

Not available.

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

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



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

### ***ENVIRONMENT***

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

### ***HEALTH***

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

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

**Environment:** Not available

**Health:** Not available

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

### SECTION 1: TITLE

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

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

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

**End use sector:** SU22

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

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

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

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

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

Use in road and construction products

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

Use in road and construction products

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

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

### SECTION 2: EXPOSURE CONTROLS

#### CONTRIBUTING SCENARIO THAT CONTROLS ENVIRONMENTAL EXPOSURE

##### **Product features**

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

##### **Quantity used**

Fraction of EU tonnage used in region 0.1

Regional use tonnage 22

Fraction of regional tonnage used locally 0.0005

Annual site tonnage 0.011

Maximum daily site tonnage 0.03

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

Continuous release - Issue days: 365

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

Local fresh water dilution factor: 10

Local marine water dilution factor: 100

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

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

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

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

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

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

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

Risk from environmental exposure is driven by soil.

Wastewater treatment is not required.

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

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

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

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

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

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

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

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

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

Assumed on-site sewage treatment plant flow: 2000

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

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

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

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

## **CONTRIBUTING SCENARIO CONTROLLING WORKER EXPOSURE**

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

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

### **Physical state**

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

### **Quantity used**

No limit.

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

Applies to daily exposures of up to 8 hours.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### *Exposure assessment (environment)*

Not available.

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

Hydrocarbon Block Method (Petrisk)

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

#### *Exposure assessment (human)*

Not available.

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

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

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

### **ENVIRONMENT**

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

### **HEALTH**

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

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

**Environment:** Not available

**Health:** Not available

## 2-methoxy-1-methylethyl acetate

### Substance identification

Chemical Name: 2-methoxy-1-methylethyl acetate

CAS number: 108-65-6

Date - Version: 02/08/2021 18.0

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

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

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

## EXPOSURE CONTROL AND RISK MANAGEMENT MEASURES

### EXPOSURE SCENARIO CONSIDERED

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

#### *Operating conditions*

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

Daily amount per site: 105.087 kg

Minimum continuous emission days per year: 300

Emission factor to air: 27%

Emission factor in water: 2%

Emission factor in soil: 0.1%

Releases based on A&B tables from TGD 2003

Freshwater dilution factor: 10

Marine water dilution factor: 100

#### *Risk management measures*

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

Prevent discharge of undissolved substance, or recover from wastewater.

Type of treatment plant: Municipal sewage treatment plant.

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

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

#### *Measures relative to the waste*

Dispose of waste cans and containers according to local regulations.

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

Risk Characterization Ratio (RCR): 0.1338

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

Maximum safe use amount: 79,180 kg/day

### EXPOSURE SCENARIO CONSIDERED

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

Area of use: Industrial

#### *Operating conditions*

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.0001

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

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

Risk Characterization Ratio (RCR): 0.01

### **Guidance for downstream users**

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

## **EXPOSURE SCENARIO CONSIDERED**

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

**Area of use:** Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.1

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

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

Risk Characterization Ratio (RCR): 0.03

### **Guidance for downstream users**

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

## **EXPOSURE SCENARIO CONSIDERED**

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

**Area of use:** Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.5

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

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

Risk Characterization Ratio (RCR): 0.03

### **Guidance for downstream users**

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

## EXPOSURE SCENARIO CONSIDERED

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

**Area of use:** Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.25

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

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

Risk Characterization Ratio (RCR): 0.01

### **Guidance for downstream users**

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

## EXPOSURE SCENARIO CONSIDERED

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

**Area of use:** Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.2

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

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

Risk Characterization Ratio (RCR): 0.14

### **Guidance for downstream users**

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

## EXPOSURE SCENARIO CONSIDERED

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

**Area of use:** Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.51

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

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

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

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

## **EXPOSURE SCENARIO CONSIDERED**

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

**Area of use: Industrial**

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

### **Risk management measures**

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

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

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

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

Risk Characterization Ratio (RCR): 0.13

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

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

Risk Characterization Ratio (RCR): 0.04

### **Guidance for downstream users**

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

## **EXPOSURE SCENARIO CONSIDERED**

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

**Area of use: Industrial**

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

### **Risk management measures**

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.76

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

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

Risk Characterization Ratio (RCR): 0.17

### **Guidance for downstream users**

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



## EXPOSURE SCENARIO CONSIDERED

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

**Area of use:** Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.51

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

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

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

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

## EXPOSURE SCENARIO CONSIDERED

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

**Area of use:** Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.51

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

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

Risk Characterization Ratio (RCR): 0.14

### **Guidance for downstream users**

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

## EXPOSURE SCENARIO CONSIDERED

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

**Area of use:** Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.51

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

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

Risk Characterization Ratio (RCR): 0.14

### ***Guidance for downstream users***

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

## **EXPOSURE SCENARIO CONSIDERED**

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

**Area of use: Industrial**

### ***Operating conditions***

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

Physical state: liquid, medium volatility

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

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

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.51

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

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

Risk Characterization Ratio (RCR): 0.11

### ***Guidance for downstream users***

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

## **EXPOSURE SCENARIO CONSIDERED**

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

**Area of use: Industrial**

### ***Operating conditions***

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.51

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

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

Risk Characterization Ratio (RCR): 0.27

### ***Guidance for downstream users***

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

## EXPOSURE SCENARIO CONSIDERED

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

**Area of use:** Industrial

### ***Operating conditions***

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.51

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

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

Risk Characterization Ratio (RCR): 0.07

### ***Guidance for downstream users***

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

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC15: Use as laboratory reagent. Laboratory activities.

**Area of use:** Industrial

### ***Operating conditions***

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.1

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

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

Risk Characterization Ratio (RCR): 0.01

### ***Guidance for downstream users***

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

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

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

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

### EXPOSURE CONTROL AND RISK MANAGEMENT MEASURES

#### EXPOSURE SCENARIO CONSIDERED

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

##### *Operating conditions*

Yearly amount used in EU: 2,600,000 kgs

Daily amount per site: 430kg

Minimum continuous emission days per year: 300

Emission factor to air: 80%

Emission factor in water: 10%

Emission factor in soil: 0.1%

Releases based on A&B tables from TGD 2003

Freshwater dilution factor: 10

Marine water dilution factor: 100

##### *Risk management measures*

Prevent discharge of undissolved substance, or recover from wastewater.

Type of treatment plant: Municipal sewage treatment plant.

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

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

##### *Measures relative to the waste*

Dispose of waste cans and containers according to local regulations.

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

Risk Characterization Ratio (RCR): 0.029

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

Maximum safe use amount: 140.104 kg/day

#### EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC1: Use in closed process, no likelihood of exposure (closed system). General exposure.

**Area of use:** Industrial

##### *Operating conditions*

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

Physical state: liquid, medium volatility

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

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

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

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

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

##### *Guidance for downstream users*

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

#### EXPOSURE SCENARIO CONSIDERED

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

**Area of use:** Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

Exposure estimation: 7.51 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.02

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

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

Risk Characterization Ratio (RCR): 0.03

### **Guidance for downstream users**

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

## **EXPOSURE SCENARIO CONSIDERED**

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

**Area of use:** Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

Operation is carried out at elevated temperature ( $> 20^\circ\text{C}$  above ambient temperature).

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

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

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

Risk Characterization Ratio (RCR): 0.1

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

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

Risk Characterization Ratio (RCR): 0.03

### **Guidance for downstream users**

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

## **EXPOSURE SCENARIO CONSIDERED**

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

**Area of use:** Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

Exposure estimation: 18.77 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.05

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

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

Risk Characterization Ratio (RCR): 0.01

### **Guidance for downstream users**

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

## EXPOSURE SCENARIO CONSIDERED

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

Area of use: Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

Exposure estimation: 15.02 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.04

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

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

Risk Characterization Ratio (RCR): 0.14

### **Guidance for downstream users**

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

## EXPOSURE SCENARIO CONSIDERED

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

Area of use: Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.1

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

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

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

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

## EXPOSURE SCENARIO CONSIDERED

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

Area of use: Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

### **Risk management measures**

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

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

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

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

Risk Characterization Ratio (RCR): 0.51

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

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

Risk Characterization Ratio (RCR): 0.17

### **Guidance for downstream users**

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

## **EXPOSURE SCENARIO CONSIDERED**

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

**Area of use:** Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

### **Risk management measures**

Wear suitable gloves compliant with EN ISO 374-1.

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

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

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### **Guidance for downstream users**

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

## **EXPOSURE SCENARIO CONSIDERED**

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

**Area of use:** Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.1

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

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

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

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

## **EXPOSURE SCENARIO CONSIDERED**

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

**Area of use:** Industrial



### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.1

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

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

Risk Characterization Ratio (RCR): 0.14

### **Guidance for downstream users**

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

## **EXPOSURE SCENARIO CONSIDERED**

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

**Area of use:** Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.1

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

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

Risk Characterization Ratio (RCR): 0.14

### **Guidance for downstream users**

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

## **EXPOSURE SCENARIO CONSIDERED**

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

**Area of use:** Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.1

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

Exposure estimation: 27.43 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.54

### **Guidance for downstream users**

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



## EXPOSURE SCENARIO CONSIDERED

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

Area of use: Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.1

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

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

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

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

## EXPOSURE SCENARIO CONSIDERED

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

Area of use: Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.1

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

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

Risk Characterization Ratio (RCR): 0.07

### **Guidance for downstream users**

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

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC15: Use as laboratory reagent. Laboratory activities.

Area of use: Industrial

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

**Exposure estimation and reference to its source**

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

Exposure estimation: 7.51 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.02

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

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

Risk Characterization Ratio (RCR): 0.01

**Guidance for downstream users**

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

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

**Short title of the exposure scenario:** Use in coatings. - Use in professional installations

SU22; ERC8a, ERC8d; PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC15, PROC19

### EXPOSURE CONTROL AND RISK MANAGEMENT MEASURES

#### EXPOSURE SCENARIO CONSIDERED

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

##### *Operating conditions*

Yearly amount used in EU: 2,600,000 kgs

Daily amount per site: 433 kg

Minimum continuous emission days per year: 300

Emission factor to air: 80%

Emission factor in water: 10%

Emission factor in soil: 0.1%

Releases based on A&B tables from TGD 2003

Freshwater dilution factor: 10

Marine water dilution factor: 100

##### *Risk management measures*

Prevent discharge of undissolved substance, or recover from wastewater.

Type of treatment plant: Municipal sewage treatment plant.

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

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

##### *Measures relative to the waste*

Dispose of waste cans and containers according to local regulations.

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

Risk Characterization Ratio (RCR): 0.029

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

Maximum safe use amount: 15,141 kg/day

#### EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** ERC8d: Wide dispersive outdoor use of processing aids in open systems.

##### *Operating conditions*

Yearly amount used in EU: 2,600,000 kgs

Daily amount per site: 433 kg

Minimum continuous emission days per year: 300

Emission factor to air: 80%

Emission factor in water: 10%

Emission factor in soil: 0.1%

Releases based on A&B tables from TGD 2003

Freshwater dilution factor: 10

Marine water dilution factor: 100

##### *Risk management measures*

Prevent discharge of undissolved substance, or recover from wastewater.

Type of treatment plant: Municipal sewage treatment plant.

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

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

### **Measures relative to the waste**

Dispose of waste cans and containers according to local regulations.

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

Risk Characterization Ratio (RCR): 0.029

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

Maximum safe use amount: 15,141 kg/day

## **EXPOSURE SCENARIO CONSIDERED**

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

**Area of use:** Professional

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.0001

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

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

Risk Characterization Ratio (RCR): 0.01

### **Guidance for downstream users**

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

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC2: Use in closed, continuous process with occasional controlled exposure.

**Filling/Preparation of equipment required for drums and containers.**

**Area of use:** Professional

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

The use has been assessed as safe.

### **Guidance for downstream users**

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

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC2: Use in closed, continuous process with occasional controlled exposure.

**General exposure. Use in confined systems (closed system). Filling/Preparation of equipment required for drums and containers.**

**Area of use:** Professional

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

Operation is carried out at elevated temperature ( $> 20^\circ\text{C}$  above ambient temperature).

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

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

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

Risk Characterization Ratio (RCR): 0.2

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

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

Risk Characterization Ratio (RCR): 0.03

### **Guidance for downstream users**

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

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC3: Use in batch process (synthesis or formulation). Preparation of material for application

**Area of use:** Professional

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.25

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

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

Risk Characterization Ratio (RCR): 0.01

### **Guidance for downstream users**

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

## **EXPOSURE SCENARIO CONSIDERED**

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

**Area of use:** Professional

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.51

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

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

Risk Characterization Ratio (RCR): 0.14

### **Guidance for downstream users**

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

## EXPOSURE SCENARIO CONSIDERED

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

Area of use: Professional

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

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

The use has been assessed as safe.

### **Guidance for downstream users**

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

## EXPOSURE SCENARIO CONSIDERED

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

Area of use: Professional

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

### **Risk management measures**

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

Alternatively: Ensure that operations are carried out externally.

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

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

Exposure estimation: 269.79 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.71

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

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

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

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

## EXPOSURE SCENARIO CONSIDERED

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

Area of use: Professional

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

Ensure that operations are carried out externally.

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

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

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### ***Guidance for downstream users***

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

## **EXPOSURE SCENARIO CONSIDERED**

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

**Area of use: Professional**

### ***Operating conditions***

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

Physical state: liquid, medium volatility

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

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

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

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

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

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

Exposure estimation: 262.79 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.71

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

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

Risk Characterization Ratio (RCR): 0.27

### ***Guidance for downstream users***

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

## **EXPOSURE SCENARIO CONSIDERED**

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

**Area of use: Professional**

### ***Operating conditions***

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.51

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

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

Risk Characterization Ratio (RCR): 0.14

### ***Guidance for downstream users***

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

## EXPOSURE SCENARIO CONSIDERED

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

**Area of use:** Professional

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

### **Risk management measures**

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

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

If there is no general ventilation, ensure that operations are carried out outdoors.

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

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

Exposure estimation: 262.79 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.71

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

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

Risk Characterization Ratio (RCR): 0.11

### **Guidance for downstream users**

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

## EXPOSURE SCENARIO CONSIDERED

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

**Area of use:** Professional

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

### **Risk management measures**

Ensure that operations are carried out externally.

Wear suitable gloves compliant with EN ISO 374-1.

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

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

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### **Guidance for downstream users**

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

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC11: Non-industrial spray application. Spraying (manual).

**Area of use:** Professional

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

### **Risk management measures**

Carry out in a vented booth or extracted enclosure. Effectiveness: 80%.

Wear a respirator conforming to EN140 with type A filter or better. Effectiveness: 90%.



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

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

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

Risk Characterization Ratio (RCR): 0.1

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

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

Risk Characterization Ratio (RCR): 0.04

### **Guidance for downstream users**

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

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors: PROC11: Non-industrial spray application. Spraying (manual).**

**Area of use: Professional**

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

### **Risk management measures**

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

Wear a respirator conforming to EN140 with type A filter or better. Effectiveness: 90%.

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

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

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

Exposure estimation: 131.4 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.36

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

Exposure estimation: 21.43 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.42

### **Guidance for downstream users**

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

## **EXPOSURE SCENARIO CONSIDERED**

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

**Area of use: Professional**

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

### **Risk management measures**

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

Alternatively: Ensure that operations are carried out externally.

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

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

Exposure estimation: 262.79 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.71

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

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

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

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

## EXPOSURE SCENARIO CONSIDERED

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

**Area of use:** Professional

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

### **Risk management measures**

Ensure that operations are carried out externally.

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

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

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### **Guidance for downstream users**

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

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC15: Use as laboratory reagent. Laboratory activities.

**Area of use:** Professional

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

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

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

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

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

Risk Characterization Ratio (RCR): 0.1

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

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

Risk Characterization Ratio (RCR): 0.01

### **Guidance for downstream users**

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

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC19: Manual mixing with direct contact using only personal protective equipment. Hand application - fingerpaints, pastels, adhesives.

**Area of use:** Professional

### **Operating conditions**

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

Physical state: liquid, medium volatility

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

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Effectiveness: 30%.

Wear chemically resistant gloves in combination with "basic" employee training. Effectiveness: 90%.

If there is no general ventilation, ensure that operations are carried out outdoors.

### ***Exposure estimation and reference to its source***

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 262.79 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.71

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 14.14 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.28

### ***Guidance for downstream users***

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC19: Manual mixing with direct contact using only personal protective equipment. Hand application - fingerpaints, pastels, adhesives.

**Area of use:** Professional

### ***Operating conditions***

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤100%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### ***Risk management measures***

Ensure that operations are carried out externally.

Wear chemically resistant gloves in combination with "basic" employee training.

### ***Exposure estimation and reference to its source***

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### ***Guidance for downstream users***

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## 8. USE IN COATINGS. - USE IN INDUSTRIAL PLANTS

**Short title of the exposure scenario:** Use in coatings. - Use in professional installations

SU22; ERC8a, ERC8d; PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC15, PROC19

### EXPOSURE CONTROL AND RISK MANAGEMENT MEASURES

#### EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** ERC8a: Wide dispersive indoor use of processing aids in open systems.

##### *Operating conditions*

Yearly amount used in EU: 2,600,000 kgs

Daily amount per site: 433 kg

Minimum continuous emission days per year: 300

Emission factor to air: 80%

Emission factor in water: 10%

Emission factor in soil: 0.1%

Releases based on A&B tables from TGD 2003

Freshwater dilution factor: 10

Marine water dilution factor: 100

##### *Risk management measures*

Prevent discharge of undissolved substance, or recover from wastewater.

Type of treatment plant: Municipal sewage treatment plant.

Total removal efficiency of the substance from the wastewater after Risk Management Measures and treatment in the treatment plant (5): 87.3%

Assumed treatment plant flow: 2,000 m<sup>3</sup>/day

##### *Measures relative to the waste*

Dispose of waste cans and containers according to local regulations.

##### *Exposure estimation and reference to its source*

Risk Characterization Ratio (RCR): 0.029

Risk from environmental exposure is driven by freshwater and marine water.

Maximum safe use amount: 15,141 kg/day

#### EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** ERC8d: Wide dispersive outdoor use of processing aids in open systems.

##### *Operating conditions*

Yearly amount used in EU: 2,600,000 kgs

Daily amount per site: 433 kg

Minimum continuous emission days per year: 300

Emission factor to air: 80%

Emission factor in water: 10%

Emission factor in soil: 0.1%

Releases based on A&B tables from TGD 2003

Freshwater dilution factor: 10

Marine water dilution factor: 100

##### *Risk management measures*

Prevent discharge of undissolved substance, or recover from wastewater.

Type of treatment plant: Municipal sewage treatment plant.

Total removal efficiency of the substance from the wastewater after Risk Management Measures and treatment in the treatment plant (5): 87.3%

Assumed treatment plant flow: 2,000 m<sup>3</sup>/day

### **Measures relative to the waste**

Dispose of waste cans and containers according to local regulations.

### **Exposure estimation and reference to its source**

Risk Characterization Ratio (RCR): 0.029

Risk from environmental exposure is driven by freshwater and marine water.

Maximum safe use amount: 15,141 kg/day

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC1: Use in closed process, no likelihood of exposure. General exposure (closed system).

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC2: Use in closed, continuous process with occasional controlled exposure. Filling/Preparation of equipment required for drums and containers.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC2: Use in closed, continuous process with occasional controlled exposure. General exposure. Use in confined systems (closed system). Filling/Preparation of equipment required for drums and containers.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Operation is carried out at elevated temperature ( $> 20^\circ\text{C}$  above ambient temperature).

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 15.02 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.4

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 1.37 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.03

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC3: Use in batch process (synthesis or formulation). Preparation of material for application

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤5%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 18.77 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.05

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 0.34 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.01

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors:** PROC4: Use in batch and other processes (synthesis) where opportunity for exposure arises. Film formation - Air drying.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤5%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 37.54 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.1

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 6.86 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.14

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC4: Use in batch and other processes (synthesis) where opportunity for exposure arises. Film formation - Air drying.

Area of use: Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Indoor/Outdoor: Indoor use.

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC5: Mixing in batch processes for formulation of preparations and articles (multistage and/or significant contact). Preparation of material for application.

Area of use: Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 75.08 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.2

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 13.71 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC5: Mixing in batch processes for formulation of preparations and articles (multistage and/or significant contact). Preparation of material for application.

Area of use: Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Ensure that operations are carried out externally.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>



## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities. Material transfers. Drum/batch transfers. Non-dedicated system.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 75.08 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.2

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 13.71 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities. Material transfers. Drum/batch transfers Dedicated plant.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 37.54 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.1

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 6.86 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.14

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

**Covered use descriptors:** PROC10: Application with rollers or brushes. Roller, spatula, jet application.

**Area of use:** Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.



### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 75.08 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.2

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 27.43 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.54

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors: PROC10: Application with rollers or brushes. Roller, spatula, jet application.**

**Area of use: Professional**

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤5%

Indoor/Outdoor: Outdoor use.

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## **EXPOSURE SCENARIO CONSIDERED**

**Covered use descriptors: PROC11: Non-industrial spray application. Spraying (manual).**

**Area of use: Professional**

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content: ≥0 - ≤5%

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Effectiveness: 30%.

Wear chemically resistant gloves in combination with "basic" employee training. Effectiveness: 90%.

If there is no general ventilation, ensure that operations are carried out outdoors.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 262.79 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.71

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 10.71 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.21

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC11: Non-industrial spray application. Spraying (manual).

Area of use: Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Ensure that operations are carried out externally.

Wear chemically resistant gloves in combination with "basic" employee training.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC13: Treatment of articles by dipping, pouring, enamelling.

Area of use: Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 75.08 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.2

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 13.71 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.27

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC13: Treatment of articles by dipping, pouring, enamelling.

Area of use: Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Indoor/Outdoor: Indoor use.

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Ensure that operations are carried out externally.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC15: Use as laboratory reagent. Laboratory activities.

Area of use: Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 7.51 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.02

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 0.34 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.01

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC19: Manual mixing with direct contact using only personal protective equipment. Hand application - fingerpaints, pastels, adhesives.

Area of use: Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Wear suitable gloves compliant with EN ISO 374-1. Effectiveness: 80%.

### **Exposure estimation and reference to its source**

Evaluation method: ESIG GES tool, Operator. Worker - inhalation, long-term - systemic.

Exposure estimation: 75.08 mg/m<sup>3</sup>

Risk Characterization Ratio (RCR): 0.2

Evaluation method: ESIG GES tool, Operator. Worker - dermal, long-term - systemic.

Exposure estimation: 28.29 mg/kg/day (body weight)

Risk Characterization Ratio (RCR): 0.56

### **Guidance for downstream users**

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>

## EXPOSURE SCENARIO CONSIDERED

Covered use descriptors: PROC19: Manual mixing with direct contact using only personal protective equipment. Hand application - fingerpaints, pastels, adhesives.

Area of use: Professional

### **Operating conditions**

Substance concentration: 1-methoxy-2-propanol content:  $\geq 0$  -  $\leq 5\%$

Physical state: liquid, medium volatility

Duration and frequency of application: 480 mins. 5 days a week

Indoor/Outdoor: Outdoor use.

Assumes use at not more than 20°C above ambient temperature.

### **Risk management measures**

Wear suitable gloves compliant with EN ISO 374-1.

### ***Exposure estimation and reference to its source***

Evaluation method: ESIG GES tool, Operator. Workers - all relevant routes of exposure

If the operating conditions identified and risk management measures are applied, the use has been assessed as safe.

### ***Guidance for downstream users***

<http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>