

Liste bezbednosnih mera

Sukladan pravilniku (EU) br. 1907/2006. (REACH), Čl. 31. Prilog 31 te naknadnim usklađivanjima uvedenim pravilnikom komisije (EU) br. 2020./878

SUPERFLEX (A)

Datum prvog izdanja: 4.5.2021.

Zastarele liste bezbednosnih mera 26/11/2024

Verzija 11

Poglavlje 1. Identifikacija hemikalije i podaci o licu koje stavlja hemikaliju u promet

1.1. Identifikacija hemikalije

Identifikacija preparata:

Trgovačko ime: SUPERFLEX (A)

Trgovački kod: S100B0038 .040

1.2. Identifikovani načini korišćenja hemikalije i načini korišćenja koji se ne preporučuju

Preporučena upotreba: Лепила, заптивне масе; Restricted to professional users

Upotreba koja nije preporučljiva Načini upotrebe koji su drugačiji od preporučenih; Not intended for use by private individuals or non-professionals.

1.3. Podaci o snabdevaču

Proizvođač: KERAKOLL S.p.A.

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Tel.+39 0536 816511 Fax. +39 0536816581

safety@kerakoll.com

1.4 Broj telefona za hitne slučajeve

European emergency phone number 112

Ireland Poison information centre: 01 809 2166 (Daily 8am-10pm) In case of emergency call 999 or 112

Malta In case of emergency call: +356 2395 2000 (24h)

Poglavlje 2. Identifikacija opasnosti



2.1. Klasifikacija hemikalije;

Uredba (EC) br. 1272/2008 (CLP)

Skin Irrit. 2 Izaziva iritaciju kože.

Eye Irrit. 2 Dovodi do jake iritacije oka.

Skin Sens. 1A Može da izazove alergijske reakcije na koži.

Aquatic Chronic 3 Štetno za živi svet u vodi sa dugotrajnim posledicama.

Repr. 1B Može štetno da utiče na plodnost.

DECL10 Ova mešavina sadrži $\geq 1\%$ titanijum-dioksida (CAS 13463-67-7). Klasifikacija titanijum-dioksida u Aneksu VI ne primenjuje se na ovu smešu u skladu sa njenom Napomenom 10.

Napomena 10: Klasifikacija kao kancerogen pri udisanju odnosi se samo na smeše u obliku praha koje sadrže 1 % ili više titanijum dioksida koji je u obliku ili ugrađen u čestice aerodinamičkog prečnika $\leq 10 \mu\text{m}$.

Fizicko-hemijski efekti po ljudsko zdravlje i okolinu:

Nema ostalih rizika

2.2. Elementi obeležavanja;

Uredba (EC) br. 1272/2008 (CLP)

Piktogrami i signal reči



Opasnost

Obaveštenje o opasnosti

H315 Izaziva iritaciju kože.

- H317

Može da izazove alergijske reakcije na koži.
- H319

Dovodi do jake iritacije oka.
- H360F

Može štetno da utiče na plodnost.
- H412

Štetno za živi svet u vodi sa dugotrajnim posledicama.

Mere opreza

- P202

Ne rukovati proizvodom dok se prethodno ne pročitaju i razumeju sve bezbednosne mere predostrožnosti.
- P280

Nositi zaštitne rukavice i zaštitu za oči.
- P280

Nositi zaštitne rukavice/ zaštitnu odeću te zaštitite oči/lice.
- P302+P352

AKO DOSPE NA KOŽU: Isprati sa dosta vode.
- P305+P351+P338

AKO DOSPE U OČI: Pažljivo ispirati vodom nekoliko minuta. Ukloniti kontaktna sočiva, ukoliko postoje i ukoliko je to moguće učiniti. Nastaviti sa ispiranjem.
- P308+P313

U SLUČAJU izlaganja ili zabrinutosti: Potražiti medicinski savet/ posmatranje.
- P501

Odlaganje sadržaja/ambalažu u skladu sa važećim propisima.

Sadržaj:

Cashew, nutshell liq.
oxirane, mono[(c12-14-alkyloxy)methyl]
derivs.

bis-[4-(2,3-epoxipropoxi)phenyl]propane

Posebne odredbe prema Prilogu XVII REACH-a i naknadnih amandmana:

Nijedan

2.3. Ostale opasnosti

Ne sadrži PBT, vPvB ili endokrino disruptivne supstance prisutne u koncentraciji >= 0,1%.

Ostali rizici: Nema ostalih rizika

Poglavlje 3. Sastav/Podaci o sastojcima

3.1. Podaci o sastojcima supstance

N.P.

3.2. Podaci o sastojcima smeše

Identifikacija preparata: SUPERFLEX (A)

Opasni sastojci u smislu CLP Uredbe koja se odnosi na razvrstavanje:

Količina	Ime	Ident. Broj.	Klasifikacija	Broj registriranih slučajeva
≥5-<10 %	bis-[4-(2,3-epoxipropoxi)phenyl]propane	CAS:1675-54-3 EC:216-823-5 Index:603-073-00-2	Eye Irrit. 2, H319 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411, M-Chronic:1	01-2119456619-26
			Specifične granične koncentracije: C ≥ 5%: Eye Irrit. 2 H319 C ≥ 5%: Skin Irrit. 2 H315	
≥3-<5 %	Propylene carbonate	CAS:108-32-7 EC:203-572-1 Index:607-194-00-1	Eye Irrit. 2, H319	01-2119537232-48
≥1-<3 %	oxirane, mono[(c12-14-alkyloxy)methyl] derivs.	CAS:68609-97-2 EC:271-846-8 Index:603-103-00-4	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Repr. 1B, H360F	01-2119485289-22
≥1-<3 %	Titanium dioxide	CAS:13463-67-7 EC:236-675-5 Index:022-006-00-2	nije klasifikovan kao opasan	
≥0.5-<1 %	Cashew, nutshell liq.	CAS:8007-24-7 EC:232-355-4	Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1A, H317	01-2119502450-57

Ova mešavina sadrži >= 1% titanijum-dioksida (CAS 13463-67-7). Klasifikacija titanijum-dioksida u Aneksu VI ne primenjuje se na ovu smešu u skladu sa njenom Napomenom 10.

Poglavlje 4. Mere prve pomoći

4.1. Opis mera prve pomoći

U slučaju kontakta sa kožom:

Odmah skinuti svu kontaminiranu odeću.

Smesta skinuti kontaminiranu odeću i ukloniti je na bezbedan način.

U slučaju kontakta sa kožom, odmah isprati sa dosta vode i sapuna

U slučaju kontakta sa očima:

U slučaju kontakta sa očima, ispirati oči vodom neko vreme, držati otvorene kapke, a potom zatražiti pomoć oftalmologa.

Zaštititi nepovređeno oko

U slučaju gutanja:

Ne uključuje povraćanje, potražiti medicinsku pomoć I pokazati SDS I oznaku opasnosti

U slučaju udisanja:

Izloženu osobu izneti na svež vazuh i držati je utopljen u stanju mirovanja

4.2. Najvažniji simptomi i efekti, akutni i odloženi

Nadraživanje očiju

Oštećenje očiju

Nadraživanje kože

Eritem

4.3. Hitna medicinska pomoć i poseban tretman

U slučaju nesreće ili slabosti odmah se obratiti lekaru (ako je moguće, pokazati uputstvo za upotrebu ili sigurnosni list).

Poglavlje 5. Mere za gašenje požara

5.1. Sredstva za gašenje požara

Moguća sredstva za gašenje požara:

Voda.

Ugljen dioksid (CO₂).

Sredstva za gašenje požara koja se ne smeju koristiti zbog bezbednosnih razloga:

Nijedan određen

5.2. Posebne opasnosti koje mogu nastati od supstanci i smeša

Ne udisati gasove koji nastanu usled eksplozije i sagorevanja.

Sagorevanjem se oslobađaju teški dimovi.

5.3. Savet za vatrogasce

Koristiti odgovarajuće aparate za disanje

Posebno pokupiti vodu koja je korišćena za gašenje požara i kontaminirana. Ona se ne sme baciti u kanizacionu mrežu.

Neoštećene kanistere ukloniti iz prostora neposredne opasnosti, ukoliko se to može uraditi na bezbedan način.

Poglavlje 6. Mere u slučaju udesa

6.1. Lične predostrožnosti, zaštitna oprema i postupci u slučaju udesa

Za osoblje koje nije zaduženo ta vanredne situacije:

Koristiti sredstva za ličnu zaštitu.

Prebaciti osobe na sigurno mesto.

Videti mere zaštite pod tačkama 7. i 8.

Za lica odgovorna za vanredne situacije:

Koristiti sredstva za ličnu zaštitu.

6.2. Predostrožnosti koje se odnose na životnu sredinu;

Sprečiti prodiranje u zemlju/dublje slojeve zemlje. Sprečiti ulivanje u površinske vode ili u kanizacionu mrežu.

Zadržati kontaminiranu vodu koja je korišćena za pranje, pa je ukloniti.

U slučaju curenja gasa ili prodiranja u vodene tokove, zemlju ili kanizacionu mrežu, obavestiti nadležne službe.

Odgovarajući materijal za prikupljanje: upijajući materijal, organski materijal, pesak

6.3. Mere koje treba preduzeti i materijal za sprečavanje širenja i sanaciju

Odgovarajući materijal za prikupljanje: upijajući materijal, organski materijal, pesak

Isprati sa dosta vode.

6.4. Upućivanje na druga poglavlja

Pogledati takođe i poglavlja 8. i 13.

Poglavlje 7. Rukovanje i skladištenje

7.1. Predostrožnosti za bezbedno rukovanje

Izbegavati kontakt s kožom i očima, udisanje pare i magle.

Primeniti najveći oprez pri rukovanju ili otvaranju kontejnera.

Ne konzumirati hranu i piće na radnom mestu.

Pogledati Poglavlje 8 u vezi s preporučenom opremom za zaštitu.

Saveti za opštu higijenu na radnom mestu:

7.2. Uslovi za bezbedno skladištenje, uključujući nekompatibilnosti

Nekompatibilni materijali:

Nijedna posebno.

Uputstva za prostorije za skladištenje:

Adekvatno proventrene prostorije.

7.3. Posebni načini korišćenja

Preporuka(e)

Nijedna posebno.

Specifična rešenja za industrijski sektor:

Nijedna posebno.

Poglavlje 8. Kontrola izloženosti i lična zaštita

8.1. Parametri kontrole izloženosti

Lista komponenti sa OEL vrednošću

	OEL Tip	Zemlja	Granica za izloženost na radu
Calcium Carbonate CAS: 471-34-1	Nacionalni m	AUSTRALIA	Dugoročno 10 mg/m ³ This value is for inhalable dust containing no asbestos and <1 % crystalline silica.
	Nacionalni m	HUNGARY	Dugoročno 10 mg/m ³ inhalable aerosol Izvor: 5/2020. (II. 6.) ITM
	Nacionalni m	IRELAND	Dugoročno 10 mg/m ³ Inhalable fraction Izvor: 2021 Code of Practice
	Nacionalni m	IRELAND	Dugoročno 4 mg/m ³ Respirable fraction Izvor: 2021 Code of Practice
	Nacionalni m	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Dugoročno 10 mg/m ³ inhalable aerosol Izvor: EH40/2005 Workplace exposure limits
	Nacionalni m	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Dugoročno 4 mg/m ³ respirable aerosol Izvor: EH40/2005 Workplace exposure limits
	Nacionalni m	CROATIA	Dugoročno 10 mg/m ³ U Izvor: NN 1/2021
	Nacionalni m	CROATIA	Dugoročno 4 mg/m ³ R Izvor: NN 1/2021
	Nacionalni m	FRANCE	Dugoročno 10 mg/m ³ Izvor: INRS outil65
	Nacionalni m	LATVIA	Dugoročno 6 mg/m ³ Izvor: KN325P1
Limestone CAS: 1317-65-3	Nacionalni m	POLAND	Dugoročno 10 mg/m ³ 4) Izvor: Dz.U. 2018 poz. 1286
	SUVA	SWITZERLAN D	Dugoročno 3 mg/m ³ TWA mg/m ³ : (a), Formel / Formal, NIOSH Izvor: suva.ch/valeurs-limites
	Nacionalni m	BULGARIA	Dugoročno 10 mg/m ³ Izvor: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	Nacionalni m	ESTONIA	Dugoročno 10 mg/m ³ Izvor: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105

Nacionalni m	ESTONIA	Dugoročno 5 mg/m ³ Izvor: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
Nacionalni m	GREECE	Dugoročno 10 mg/m ³ εισπν Izvor: ΦΕΚ 94/Α` 13.5.1999
Nacionalni m	GREECE	Dugoročno 5 mg/m ³ αvapn Izvor: ΦΕΚ 94/Α` 13.5.1999
Nacionalni m	GREECE	Dugoročno 10 mg/m ³ εισπν. Izvor: ΦΕΚ 94/Α` 13.5.1999
Nacionalni m	GREECE	Dugoročno 5 mg/m ³ αvapn. Izvor: ΦΕΚ 94/Α` 13.5.1999
Nacionalni m	HUNGARY	Dugoročno 10 mg/m ³ N Izvor: 5/2020. (II. 6.) ITM rendelet
WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Dugoročno 10 mg/m ³ Izvor: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Dugoročno 4 mg/m ³ Izvor: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Dugoročno 10 mg/m ³ Izvor: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Dugoročno 4 mg/m ³ Izvor: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Dugoročno 10 mg/m ³ Izvor: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Dugoročno 4 mg/m ³ Izvor: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
Nacionalni m	BELGIUM	Dugoročno 10 mg/m ³ Izvor: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
Nacionalni m	IRELAND	Dugoročno 10 mg/m ³ Izvor: 2021 Code of Practice
Nacionalni m	IRELAND	Dugoročno 4 mg/m ³ Izvor: 2021 Code of Practice
Nacionalni m	LATVIA	Dugoročno 2 mg/m ³ Izvor: KN325P1
Nacionalni m	LITHUANIA	Dugoročno 7 mg/m ³ Izvor: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389

Propylene carbonate
CAS: 108-32-7

Titanium dioxide
CAS: 13463-67-7

SUVA	SWITZERLAND	Dugoročno 25.5 mg/m ³ - 6 ppm; Skraćenica 25.5 mg/m ³ - 6 ppm SSC, Yeux / Auge Izvor: suva.ch/valeurs-limites
Nacionalni m	GERMANY	Dugoročno 8.5 mg/m ³ - 2 ppm DFG, Y, 11, 1 (I) Izvor: TRGS 900
ACGIH		Dugoročno 2.5 mg/m ³ (8h) Finescale particles; R ; A3 - LRT irr, pneumoconiosis
Nacionalni m	AUSTRALIA	Dugoročno 10 mg/m ³ (8h)
Nacionalni m	GERMANY	Dugoročno 0.3 mg/m ³ ; Skraćenica 2.4 mg/m ³ DFG; Long term and short term: excluding ultrafine particles; respirable fraction; multiplied by the material density; Izvor: TRGS900
Nacionalni m	BELGIUM	Dugoročno 10 mg/m ³ Izvor: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
Nacionalni m	CROATIA	Dugoročno 10 mg/m ³ U Izvor: NN 1/2021
Nacionalni m	CROATIA	Dugoročno 4 mg/m ³ R Izvor: NN 1/2021
Nacionalni m	IRELAND	Dugoročno 10 mg/m ³ Izvor: 2021 Code of Practice
Nacionalni m	IRELAND	Dugoročno 4 mg/m ³ Izvor: 2021 Code of Practice
Nacionalni m	ROMANIA	Dugoročno 10 mg/m ³ ; Skraćenica 15 mg/m ³ Izvor: Republicarea 1 - nr. 743 din 29 iulie 2021
Nacionalni m	SPAIN	Dugoročno 10 mg/m ³ Izvor: LEP 2022
Nacionalni m	AUSTRIA	Dugoročno 5 mg/m ³ ; Skraćenica 10 mg/m ³ 60(Miw), 2x, MAK, A Izvor: BGBl. II Nr. 156/2021
Nacionalni m	BULGARIA	Dugoročno 10 mg/m ³ Izvor: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
Nacionalni m	DENMARK	Dugoročno 6 mg/m ³ K Izvor: BEK nr 2203 af 29/11/2021
Nacionalni m	ESTONIA	Dugoročno 5 mg/m ³ Izvor: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
Nacionalni m	FRANCE	Dugoročno 10 mg/m ³ Cancérogène de catégorie 2 Izvor: INRS outil65
Nacionalni m	GREECE	Dugoročno 10 mg/m ³ εισπν. Izvor: ΦΕΚ 94/Α` 13.5.1999
Nacionalni m	GREECE	Dugoročno 5 mg/m ³ αvapn. Izvor: ΦΕΚ 94/Α` 13.5.1999
Nacionalni m	LATVIA	Dugoročno 10 mg/m ³ Izvor: KN325P1
Nacionalni m	LITHUANIA	Dugoročno 5 mg/m ³ Izvor: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
Nacionalni m	NORWAY	Dugoročno 5 mg/m ³ Izvor: FOR-2021-06-28-2248
Nacionalni m	POLAND	Dugoročno 10 mg/m ³ 4), 7) Izvor: Dz.U. 2018 poz. 1286

Silicon dioxide; synthetic amorphous silicon dioxide CAS: 7631-86-9	Nacionalni m	SLOVAKIA	Dugoročno 5 mg/m ³ Izvor: 355 NARIADENIE VLÁDY z 10. mája 2006
	Nacionalni m	SWEDEN	Dugoročno 5 mg/m ³ Izvor: AFS 2021:3
	SUVA	SWITZERLAND	Dugoročno 3 mg/m ³ TWA mg/m ³ : (a), SSC, Formel / Formal, NIOSH Izvor: suva.ch/valeurs-limites
	WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Dugoročno 10 mg/m ³ Izvor: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
	Nacionalni m	AUSTRALIA	Dugoročno 2 mg/m ³ This value is for inhalable dust containing no asbestos and < 1% crystalline silica
	Nacionalni m	BELGIUM	Dugoročno 10 mg/m ³ Izvor: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	Nacionalni m	IRELAND	Dugoročno 6 mg/m ³ Inhalable fraction Izvor: 2021 Code of Practice
	Nacionalni m	IRELAND	Dugoročno 2.4 mg/m ³ Respirable fraction Izvor: 2021 Code of Practice
	Nacionalni m	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Dugoročno 6 mg/m ³ Inhalable aerosol Izvor: EH40/2005 Workplace exposure limits
	Nacionalni m	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Dugoročno 2.4 mg/m ³ Respirable aerosol Izvor: EH40/2005 Workplace exposure limits
Aluminium oxide CAS: 1344-28-1	Nacionalni m	GERMANY	Dugoročno 4 mg/m ³ DFG, 2, Y, E Izvor: TRGS 900
	Nacionalni m	SLOVENIA	Dugoročno 4 mg/m ³ Y, (I) Izvor: UL št. 72, 11. 5. 2021
	Nacionalni m	AUSTRIA	MAK Izvor: BGBl. II Nr. 156/2021
	Nacionalni m	ESTONIA	Dugoročno 2 mg/m ³ 1 Izvor: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
	Nacionalni m	LATVIA	Dugoročno 1 mg/m ³ Izvor: KN325P1
	SUVA	SWITZERLAND	SSC, Fibpulm / Lungenfibrose, Des VMEs se trouvent sous les substances associées / MAK-Werte finden sich unter den zugeordneten Stoffen Izvor: suva.ch/valeurs-limites
	SUVA	SWITZERLAND	Dugoročno 4 mg/m ³ TWA mg/m ³ : (i), SSC, Fibpulm / Lungenfibrose Izvor: suva.ch/valeurs-limites
	Nacionalni m	AUSTRALIA	Dugoročno 10 mg/m ³ (8h) Inhalable dust containing no asbestos and < 1% crystalline silica
	Nacionalni m	BELGIUM	Dugoročno 1 mg/m ³ Izvor: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1

Nacionalni m	CROATIA	Dugoročno 10 mg/m3 U Izvor: NN 1/2021
Nacionalni m	CROATIA	Dugoročno 4 mg/m3 R Izvor: NN 1/2021
Nacionalni m	ROMANIA	Dugoročno 2 mg/m3; Skraćenica 5 mg/m3 (Aerosoli) Izvor: Republicarea 1 - nr. 743 din 29 iulie 2021
Nacionalni m	SPAIN	Dugoročno 10 mg/m3 véase Capítulo 9 Izvor: LEP 2022
Nacionalni m	AUSTRIA	Dugoročno 5 mg/m3; Skraćenica 10 mg/m3 60(Miw), 2x, A Izvor: GKV, BGBl. II Nr. 156/2021
Nacionalni m	AUSTRIA	Dugoročno 5 mg/m3; Skraćenica 10 mg/m3 60(Miw), 2x, MAK, A Izvor: GKV, BGBl. II Nr. 156/2021
Nacionalni m	DENMARK	Dugoročno 5 mg/m3 Izvor: BEK nr 2203 af 29/11/2021
Nacionalni m	ESTONIA	Dugoročno 4 mg/m3 1 Izvor: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
Nacionalni m	FRANCE	Dugoročno 10 mg/m3 Izvor: INRS outil65
Nacionalni m	GREECE	Dugoročno 10 mg/m3 εισπν Izvor: ΦΕΚ 94/A` 13.5.1999
Nacionalni m	GREECE	Dugoročno 5 mg/m3 αvapn Izvor: ΦΕΚ 94/A` 13.5.1999
Nacionalni m	HUNGARY	Dugoročno 5 mg/m3 N Izvor: 5/2020. (II. 6.) ITM rendelet
Nacionalni m	HUNGARY	Dugoročno 2 mg/m3 resp, N Izvor: 5/2020. (II. 6.) ITM rendelet
Nacionalni m	LATVIA	Dugoročno 6 mg/m3 Izvor: KN325P1
Nacionalni m	LATVIA	Dugoročno 4 mg/m3 Izvor: KN325P1
Nacionalni m	NORWAY	Dugoročno 10 mg/m3 1 Izvor: FOR-2021-06-28-2248
Nacionalni m	POLAND	Dugoročno 2.5 mg/m3 4) Izvor: Dz.U. 2018 poz. 1286
Nacionalni m	POLAND	Dugoročno 1.2 mg/m3 6) Izvor: Dz.U. 2018 poz. 1286
Nacionalni m	SLOVAKIA	Dugoročno 4 mg/m3 10) Izvor: 355 NARIADENIE VLÁDY z 10. mája 2006
SUVA	SWITZERLAN D	Dugoročno 3 mg/m3 TWA mg/m3: (a), B, Formel / Formal, NIOSH Izvor: suva.ch/valeurs-limites
SUVA	SWITZERLAN D	Dugoročno 3 mg/m3; Skraćenica 24 mg/m3 TWA mg/m3: (a), Fimétal / Metallrauch, NIOSH Izvor: suva.ch/valeurs-limites

Kaolin CAS: 1332-58-7	WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Dugoročno 10 mg/m3 Izvor: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
	WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Dugoročno 4 mg/m3 Izvor: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
	ACGIH		Dugoročno 2 mg/m3 (8h) E,R, A4 - Pneumoconiosis
	Nacionalni m	AUSTRALIA	Dugoročno 10 mg/m3 (8h) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.
	Nacionalni m	BELGIUM	Dugoročno 2 mg/m3 Izvor: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	Nacionalni m	DENMARK	Dugoročno 2 mg/m3 Izvor: BEK nr 2203 af 29/11/2021
	Nacionalni m	FINLAND	Dugoročno 2 mg/m3 alveolijae Izvor: HTP-ARVOT 2020
	Nacionalni m	IRELAND	Dugoročno 2 mg/m3 Izvor: 2021 Code of Practice
	Nacionalni m	POLAND	Dugoročno 10 mg/m3 4), 7) Izvor: Dz.U. 2018 poz. 1286
	SUVA	SWITZERLAND	Dugoročno 3 mg/m3 TWA mg/m3: (a), Fibpulm / Lungenfibrose Izvor: suva.ch/valeurs-limites
	WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Dugoročno 2 mg/m3 Izvor: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
	Nacionalni m	CROATIA	Dugoročno 2 mg/m3 R Izvor: NN 1/2021

Granične vrednosti izloženosti za PNEC

bis-[4-(2,3-epoxipropoxy)phenyl]propane
CAS: 1675-54-3

Put izlaganja: Slatka voda; PNEC limit: 0.006 mg/l

Put izlaganja: Morska voda; PNEC limit: 600 ng/L

Put izlaganja: Slatkovodni sedimenti; PNEC limit: 0.996 mg/kg

Put izlaganja: Седименти морске воде; PNEC limit: 0.099 mg/kg

Put izlaganja: Земљиште; PNEC limit: 0.196 mg/kg

Put izlaganja: Микроорганизми у третману отпадних вода; PNEC limit: 10 mg/l

Put izlaganja: Iskusna isturenost (slatka voda); PNEC limit: 0.018 mg/l

Propylene carbonate
CAS: 108-32-7

Put izlaganja: Slatka voda; PNEC limit: 900 µg/l

Put izlaganja: Iskusna isturenost (slatka voda); PNEC limit: 9 mg/l

Put izlaganja: Morska voda; PNEC limit: 90 µg/l

Put izlaganja: Iskreana ispusna voda (morska voda); PNEC limit: 900 µg/l

Put izlaganja: Микроорганизми у третману отпадних вода; PNEC limit: 7400 mg/l

Put izlaganja: Земљиште; PNEC limit: 810 µg/kg

oxirane, mono[(c12-14-alkyloxy)methyl] derivs.

Put izlaganja: Slatka voda; PNEC limit: 0.007 mg/l

Put izlaganja: Morska voda; PNEC limit: 0.072 µg/l
 Put izlaganja: Микроорганизми у третману отпадних вода; PNEC limit: 10 mg/l
 Put izlaganja: Slatkovodni sedimenti; PNEC limit: 66.77 mg/kg
 Put izlaganja: Седименти морске воде; PNEC limit: 6.677 mg/kg
 Put izlaganja: Земљиште; PNEC limit: 80.12 mg/kg
 Put izlaganja: Iskusna isturenost (slatka voda); PNEC limit: 0.072 mg/l
 Put izlaganja: Slatka voda; PNEC limit: 0.184 mg/l

Titanium dioxide
 CAS: 13463-67-7

Put izlaganja: Morska voda; PNEC limit: 0.018 mg/l
 Put izlaganja: Iskusna isturenost (slatka voda); PNEC limit: 1 mg/kg
 Put izlaganja: Iskrena ispusna voda (morska voda); PNEC limit: 100 mg/kg
 Put izlaganja: Микроорганизми у третману отпадних вода; PNEC limit: 100 mg/kg
 Put izlaganja: Slatka voda; PNEC limit: 0.003 mg/l

Cashew, nutshell liq.
 CAS: 8007-24-7

Put izlaganja: Седименти морске воде; PNEC limit: 0.088 mg/kg
 Put izlaganja: Slatkovodni sedimenti; PNEC limit: 0.97 mg/kg
 Put izlaganja: Iskusna isturenost (slatka voda); PNEC limit: 0.03 mg/l
 Put izlaganja: Земљиште; PNEC limit: 6.71 mg/kg

Izvedeni nivo Bez Efekata. (DNEL)

bis-[4-(2,3-epoxipropoxy)phenyl]
 propane
 CAS: 1675-54-3

Put izlaganja: Ljudska oralna; Učestalost izlaganja: Dugoročni, lokalni efekti
 Stručni radnik: 0.75 mg/kg

Put izlaganja: Ljudska oralna; Učestalost izlaganja: Dugoročni, sistemski efekti
 Stručni radnik: 0.75 mg/kg

Put izlaganja: Ljudska dermalna; Učestalost izlaganja: Dugoročni, sistemski efekti
 Stručni radnik: 3.571 mg/kg

Put izlaganja: Ljudska dermalna; Učestalost izlaganja: Dugoročni, lokalni efekti
 Stručni radnik: 3.571 mg/kg

Put izlaganja: Ljudska udisajna; Učestalost izlaganja: Dugoročni, sistemski efekti
 Stručni radnik: 12.25 mg/m³

Put izlaganja: Ljudska udisajna; Učestalost izlaganja: Dugoročni, lokalni efekti
 Stručni radnik: 12.25 mg/m³

Propylene carbonate
 CAS: 108-32-7

Put izlaganja: Ljudska udisajna; Učestalost izlaganja: Dugoročni, sistemski efekti
 Stručni radnik: 70.53 mg/m³; Potrošač: 17.4 mg/m³

Put izlaganja: Ljudska udisajna; Učestalost izlaganja: Dugoročni, lokalni efekti
 Stručni radnik: 20 mg/m³; Potrošač: 10 mg/m³

Put izlaganja: Ljudska dermalna; Učestalost izlaganja: Dugoročni, lokalni efekti
 Stručni radnik: 20 mg/kg; Potrošač: 10 mg/kg

Put izlaganja: Ljudska oralna; Učestalost izlaganja: Dugoročni, sistemski efekti
 Potrošač: 10 mg/kg

oxirane, mono[(c12-14-alkyloxy)methyl] derivs.
 CAS: 68609-97-2

Put izlaganja: Ljudska dermalna; Učestalost izlaganja: Kratkoročni, sistemski efekti
 Stručni radnik: 17 mg/kg; Potrošač: 10 mg/kg

Put izlaganja: Ljudska udisajna; Učestalost izlaganja: Kratkoročni, sistemski efekti
 Stručni radnik: 29 mg/m³; Potrošač: 7.6 mg/m³

Put izlaganja: Ljudska oralna; Učestalost izlaganja: Kratkoročni, sistemski efekti
 Potrošač: 1219 mg/kg

Put izlaganja: Ljudska dermalna; Učestalost izlaganja: Kratkoročni, lokalni efekti
 Stručni radnik: 68 mg/kg; Potrošač: 40 mg/kg

Put izlaganja: Ljudska udisajna; Učestalost izlaganja: Kratkoročni, lokalni efekti
 Stručni radnik: 9.8 mg/m³; Potrošač: 2.9 mg/m³

Put izlaganja: Ljudska dermalna; Učestalost izlaganja: Dugoročni, sistemski efekti
 Stručni radnik: 3.9 mg/kg; Potrošač: 2.35 mg/kg

Put izlaganja: Ljudska udisajna; Učestalost izlaganja: Dugoročni, sistemski efekti
Stručni radnik: 13.8 mg/m³; Potrošač: 4.1 mg/m³

Put izlaganja: Ljudska oralna; Učestalost izlaganja: Dugoročni, sistemski efekti
Potrošač: 1 mg/kg

Put izlaganja: Ljudska dermalna; Učestalost izlaganja: Dugoročni, lokalni efekti
Stručni radnik: 1.7 mg/kg; Potrošač: 1 mg/kg

Put izlaganja: Ljudska udisajna; Učestalost izlaganja: Dugoročni, lokalni efekti
Stručni radnik: 0.98 mg/kg; Potrošač: 1.46 mg/kg

Titanium dioxide
CAS: 13463-67-7 Put izlaganja: Ljudska udisajna; Učestalost izlaganja: Dugoročni, lokalni efekti
Stručni radnik: 10 mg/m³

Cashew, nutshell liq.
CAS: 8007-24-7 Put izlaganja: Ljudska dermalna; Učestalost izlaganja: Dugoročni, lokalni efekti
Stručni radnik: 0.5 mg/kg; Potrošač: 0.25 mg/kg

Put izlaganja: Ljudska udisajna; Učestalost izlaganja: Dugoročni, lokalni efekti
Stručni radnik: 0.88 mg/m³; Potrošač: 0.2 mg/m³

Put izlaganja: Ljudska oralna; Učestalost izlaganja: Dugoročni, lokalni efekti
Potrošač: 0.25 mg/kg

8.2. Kontrola izloženosti i lična zaštita

Zaštita očiju:

Наочаре са бочном заштитом.(EN166)

Zaštita kože:

Одећа за хемијску заштиту. Заштитне ципеле.

Zaštita za ruke:

Suitable materials for safety gloves (EN 374, EN 16523-1:2015+A1:2018: Level 6):

Nitrile rubber - NBR: thickness ≥0,4mm; breakthrough time ≥480min.

Butyl rubber - IIR: thickness ≥0,4mm; breakthrough time ≥480min.

Zaštita pri disanju:

Respiratory protective equipment should be worn when there is a possibility that the exposure limit value will be exceeded. In the absence of exposure limit values, respiratory protective equipment should be worn when adverse effects occur, such as respiratory irritation or discomfort, or if indicated by the results of your risk assessment. Use the following CE-approved air-purifying respirator: A-type organic vapour cartridge (boiling point >65°C)

Toplotni rizici:

Not expected if used as intended

Kontrola izlaganja u okruženje:

Prevent the product from entering sewers or surface and underground water

Higijenske i tehničke mere

N.P.

Poglavlje 9. Fizička i hemijska svojstva

9.1. Podaci o osnovnim fizičkim i hemijskim svojstvima hemikalije

fizičko stanje: Tečnost

Boja: 6eo

Mirisu: N.P.

Pragu mirisa: N.P.

pH: Nije relevantno

Kinematička viskoznost: N.P.

Tačka topljenja/tačka mržnjenja N.P.

Tačka ključanja, početna tačka ključanja i opseg ključanja N.P.

Tačka paljenja: > 93°C

Donja i gornja granica sprečavanja eksplozije: N.P.

Relativna gustoća pare: N.P.

Napon pare: N.P.

Gustoća i/ili relativna gustoća: 1.46 g/cm³

Rastvorljivost u vodi: N.P.

Rastvorljivost u ulju: N.P.

Koeficijent raspodele u sistemu n-oktanol/voda: N.P.

Temperatura samopaljenja: N.P.

Temperatura razlaganja: N.P.

Zapaljivost: N.P.

Isparljiva organska jedinjenja - VOC = 4.2 % ; 61.32 g/l

Karakteristike čestica:

Veličina čestice: N.P.

9.2. Ostali podaci

Nema drugih relevantnih informacija

Poglavlje 10. Stabilnost i reaktivnost

10.1. Reaktivnost

Stabilan u normalnim uslovima

10.2. Hemijska stabilnost

Podaci nisu dostupni.

10.3. Mogućnost nastanka opasnih reakcija

Nijedan.

10.4. Uslovi koje treba izbegavati

Stabilno u normalnim uslovima

10.5. Nekompatibilni materijali

Nijednu pojedinačno.

10.6. Opasni proizvodi razgradnje

Nijedan.

Poglavlje 11. Toksikološki podaci

11.1. Informacija o klasama opasnosti prema Uredbi (EC) No 1272/2008

Toksikološki podaci o proizvodu:

a) akutna toksičnost	Nije klasifikovano Na osnovu raspoloživih podataka nisu ispunjeni kriterijumi klasifikacije
b) kožno nagrizanje/nadraživanje	Proizvod je klasifikovan: Skin Irrit. 2(H315)
c) teške očne povrede/teško očno nadraživanje	Proizvod je klasifikovan: Eye Irrit. 2(H319)
d) izazivanje kožne ili disajne preosetljivosti	Proizvod je klasifikovan: Skin Sens. 1A(H317)
e) mutagenost zametnih stanica	Nije klasifikovano Na osnovu raspoloživih podataka nisu ispunjeni kriterijumi klasifikacije
f) kancerogenost	Nije klasifikovano Na osnovu raspoloživih podataka nisu ispunjeni kriterijumi klasifikacije
g) reproduktivna toksičnost	Proizvod je klasifikovan: Repr. 1B(H360)
h) Specifična toksičnost za ciljne organe (STOT) jednokratno izlaganje	Nije klasifikovano Na osnovu raspoloživih podataka nisu ispunjeni kriterijumi klasifikacije
i) Specifična toksičnost za ciljne organe (STOT) ponovljeno izlaganje	Nije klasifikovano Na osnovu raspoloživih podataka nisu ispunjeni kriterijumi klasifikacije
j) opasnost u slučaju udisanja	Nije klasifikovano Na osnovu raspoloživih podataka nisu ispunjeni kriterijumi klasifikacije

Toksikološki podaci o osnovnim supstancama izdvojenim iz proizvoda:

bis-[4-(2,3-epoxipropoxy)phenyl] propane	a) akutna toksičnost	LD50 Oralno Zec = 19800 mg/kg	
		LD50 Koža Zec > 20 mg/kg 24h	
	b) kožno nagrizanje/nadraživanje	Nadražuje kožu Zec Pozitivno	epoxy resin with an average molecular mass <= 700 d irritate skin of rabbits
	c) teške očne povrede/teško očno nadraživanje	Nadražuje oči Zec Da	
	d) izazivanje kožne ili disajne preosetljivosti	Čini kožu preosetljivom Pozitivno	Mouse

	f) kancerogenost	Genotoksičnost Negativno Kancerogenost Oralno Pacov = 15 mg/kg Kancerogenost Koža Pacov = 1 mg/kg	Mouse, oral NOAEL NOAEL
	g) reproduktivna toksičnost	Nije uočeno dejstvo Oralno Pacov = 750 mg/kg	
Propylene carbonate	a) akutna toksičnost	LD50 Oralno Pacov > 5000 mg/kg LC50 Udisanje pare Pacov Negativno 8h LD50 Koža Zec >= 2000 mg/kg 24h	
	b) kožno nagrizanje/nadraživanje	Nadražuje kožu Zec Negativno 24h	
	c) teške očne povrede/teško očno nadraživanje	Nadražuje oči Zec Da	
	d) izazivanje kožne ili disajne preosetljivosti	Čini kožu preosetljivom Negativno	
	f) kancerogenost	Genotoksičnost Negativno Kancerogenost Negativno	Mouse intraperitoneal rout Mouse
	g) reproduktivna toksičnost	Nije uočeno štetno dejstvo Oralno = 10100 mg/kg	Mouse
oxirane, mono[(c12-14-alkyloxy)methyl] derivs.	a) akutna toksičnost	LD50 Oralno Pacov = 26800 mg/kg LC50 Udisanje Pacov > 0.206 mg/l 4h LD50 Koža Zec > 4.5 ml/kg 24h	
	b) kožno nagrizanje/nadraživanje	Nadražuje kožu Zec Da	
	c) teške očne povrede/teško očno nadraživanje	Nadražuje oči Zec Da	
	d) izazivanje kožne ili disajne preosetljivosti	Čini kožu preosetljivom Zamorac Pozitivno	
	g) reproduktivna toksičnost	Nije uočeno štetno dejstvo Koža Pacov = 200 mg/kg	
Titanium dioxide	a) akutna toksičnost	LD50 Oralno Pacov > 5000 mg/kg LC50 Udisanje > 6.82 mg/l LD50 Koža Pacov > 2000 mg/kg	
	c) teške očne povrede/teško očno nadraživanje	Nagriza oči Negativno Nadražuje oči Ne	
	d) izazivanje kožne ili disajne preosetljivosti	Čini kožu preosetljivom Negativno	
	i) Specifična toksičnost za ciljne organe (STOT) ponovljeno izlaganje	Nije uočeno štetno dejstvo 1000	
Cashew, nutshell liq.	a) akutna toksičnost	LD50 Oralno Pacov = 2000 mg/kg LD50 Koža Pacov > 2000 mg/kg 24h	
	b) kožno nagrizanje/nadraživanje	Nadražuje kožu Zec Pozitivno	
	c) teške očne povrede/teško očno nadraživanje	Nadražuje oči Zec Da	

11.2. Informacije o drugim opasnostima**Endokrino disruptivna svojstva:**Bez endokrino disruptivnih supstanci prisutnih u koncentraciji $\geq 0.1\%$ **Poglavlje 12. Ekotoksikološki podaci****12.1. Toksičnost**

Primeniti dobru radnu praksu da se proizvod ne oslobađa u okolinu.

Eko-Toksikološki podaci:

Štetno za živi svet u vodi sa dugotrajnim posledicama.

Ekotoksikološka svojstva proizvoda

Proizvod je klasifikovan: Aquatic Chronic 3(H412)

Lista komponenti sa eko-toksikološkim svojstvima

Sastojak	Ident. Broj.	Ekotoksik. Informacije
bis-[4-(2,3-epoxipropoxi)phenyl]propane	CAS: 1675-54-3 - EINECS: 216-823-5 - INDEX: 603-073-00-2	a) Akutna toksičnost na vodene organizme : LC50 Riba Oncorhynchus mykiss = 2 mg/L 96h a) Akutna toksičnost na vodene organizme : LC50 Dafinija Daphnia magna = 1.8 mg/L 48h a) Akutna toksičnost na vodene organizme : EC50 Alge Scenedesmus capricornutum = 11 mg/L 72h EPA-660/3-75-009 c) Bakterijska toksičnost : EC50 Sludge activated sludge = 100 mg/L 3h
Propylene carbonate	CAS: 108-32-7 - EINECS: 203-572-1 - INDEX: 607-194-00-1	a) Akutna toksičnost na vodene organizme : LC50 Riba Cyprinus carpio > 1000 mg/L 96h EU Method C1 a) Akutna toksičnost na vodene organizme : LC50 Dafinija Daphnia magna > 1000 mg/L 48h EU Method C2 a) Akutna toksičnost na vodene organizme : EC50 Alge freshwater algae > 900 mg/L 72h OECD guideline 201 c) Bakterijska toksičnost : NOEC Pseudomonas putida = 7400 mg/L
oxirane, mono[(c12-14-alkyloxy)methyl] derivs.	CAS: 68609-97-2 - EINECS: 271-846-8 - INDEX: 603-103-00-4	a) Akutna toksičnost na vodene organizme : LC50 Riba Oncorhynchus mykiss > 5000 mg/L 96h a) Akutna toksičnost na vodene organizme : NOEC Alge Pseudokirchneriella subcapitata = 500 mg/L 72h „OECD Guideline 201 (Alga, Growth Inhibition Test) a) Akutna toksičnost na vodene organizme : EC50 Alge Pseudokirchneriella subcapitata = 843 mg/L 72h c) Bakterijska toksičnost : EC50 Sludge > 100 mg/L
Titanium dioxide	CAS: 13463-67-7 - EINECS: 236-675-5 - INDEX: 022-006-00-2	a) Akutna toksičnost na vodene organizme : LC50 Riba Pimephales promelas (Cavedano americano) > 1000 mg/L 96h a) Akutna toksičnost na vodene organizme : EC50 Alge Pseudokirchneriella subcapitata (alghe cloroficee) > 100 mg/L 72h a) Akutna toksičnost na vodene organizme : NOEC Alge = 5600 mg/L a) Akutna toksičnost na vodene organizme : EC50 Dafinija Daphnia magna (Pulce d'acqua grande) > 100 mg/L 48h
Cashew, nutshell liq.	CAS: 8007-24-7 - EINECS: 232-355-4	a) Akutna toksičnost na vodene organizme : LC50 Riba Cyprinodon variegatus = 1000 mg/L 96h „OECD Guideline 203 (Fish, Acute Toxicity Test)

a) Akutna toksičnost na vodene organizme : LC50 Dafinija Daphnia magna = 40.46 mg/L 48h „EPA OPPTS 850.1010 (Aquatic Invertebrate Acute Toxicity Test, Freshwater Daphnids)

a) Akutna toksičnost na vodene organizme : EC50 Alge Pseudokirchneriella subcapitata = 1300 mg/L 72h „OECD Guideline 201 (Alga, Growth Inhibition Test)

a) Akutna toksičnost na vodene organizme : NOEC Sludge activated sludge = 100 mg/L

12.2. Perzistentnost i razgradljivost

Sastojak	Postojanost/razgradivost:	Test	Vredno st	Beleške:
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Nije brzo-biološki razgradiv	Potrošnja kiseonika		OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Propylene carbonate	Brzo-biološki razgradiv	CO2 produkcija		OECD guideline 301 B
oxirane, mono[(c12-14-alkyloxy)methyl] derivs.	Brzo-biološki razgradiv	Potrošnja kiseonika	87.000	%; OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Cashew, nutshell liq.	Brzo-biološki razgradiv	Potrošnja kiseonika	83.800	%; EU Method C.4-D

12.3. Potencijal bioakumulacije

Sastojak	Bioakumulativnost	Test	Vredno st
bis-[4-(2,3-epoxipropoxi)phenyl]propane	Bioakumulativan	BCF - Biokoncentracioni faktor	31.000
oxirane, mono[(c12-14-alkyloxy)methyl] derivs.	Bioakumulativan	BCF - Biokoncentracioni faktor	160.000

12.4. Mobilnost u zemljištu

N.P.

12.5. Rezultati ocenjivanja svojstava PBT i vPvB

Ne PBT, vPvB supstance prisutne u koncentraciji $\geq 0,1\%$.

12.6. Endokrino disruptivna svojstva

Bez endokrino disruptivnih supstanci prisutnih u koncentraciji $\geq 0.1\%$

12.7. Ostala neželjena dejstva

N.P.

Poglavlje 13. Odlaganje

13.1. Metode tretmana otpada

Regenerirati ako je moguće. Pri tome se pridržavati propisanih lokalnih i državnih propisa. Nije dozvoljeno odlaganje putem ispuštanja u otpadne vode

Шифра отпада према европском каталогу отпада (ЕВЦ) не може се одредити због зависности од употребе. Обратите се овлашћеном сервису за одлагање отпада.

Proizvod koji se odlaže kao takav, u skladu sa Uredbom (EU) 1357/2014, mora biti klasifikovan kao opasan otpad

Poglavlje 14. Podaci o transportu

Nije klasificirano kao opasno po propisima za transport.

14.1 UN broj ili identifikacioni broj

N/A

14.2. UN naziv za teret u transportu

ADR-Naziv za isporuku: N/A

IATA-Naziv za isporuku: N/A

IMDG-Naziv za isporuku: N/A

14.3. Klasa opasnosti u transportu

IATA-Razred: N/A

IMDG-Razred: N/A

14.4. Ambalažna grupa

IATA-Grupa pakovanja: N/A

IMDG-Grupa pakovanja: N/A

14.5. Opasnost po životnu sredinu

N.P.

IMDG-EMS: N/A

14.6. Posebne predostrožnosti za korisnika

Transport kopnenim putem - put i željeznica (ADR-RID):

ADR-Označavanje: N/A

ADR - Identifikacijski broj opasnosti: N/A

ADR-posebne odredbe: N/A

ADR ograničenja prevoza u tunelu: N/A

ADR Limited Quantities: N/A

ADR Excepted Quantities: N/A

Vazdušni transport (IATA):

IATA-Putnički avion: N/A

IATA-Teretni avion: N/A

IATA-Označavanje: N/A

IATA-Opasnosti nižeg reda: N/A

IATA-Erg: N/A

IATA-Specijalne napomene: N/A

Transport pomorskim putem (IMDG):

ИМДГ-Складиштење и руковање: N/A

ИМДГ-Серпегација: N/A

IMDG-Opasnosti nižeg reda: N/A

IMDG-Specijalne napomene: N/A

14.7. Pomorski transport u rasutom stanju prema IMO instrumentima

N.P.

Poglavlje 15. Regulatorni podaci

15.1. Propisi u vezi sa bezbednošću, zdravljem i životnom sredinom

Direktiva 98/24/EC (Rizici koji nastaju od hemijskih agenasa na radu)

Direktiva 2000/39/EC (Granična vrednost profesionalne izloženosti)

Uredba (EC) br. 1907/2006 (REACH)

Uredba (EC) br. 1272/2008 (CLP)

Uredba (EC) br. 790/2009 (ATP 1 CLP) i (EZ) br. 758/2013

Uredba (EZ) br. 286/2011 (ATP 2 CLP)

Uredba (EZ) br. 618/2012 (ATP 3 CLP)

Uredba (EZ) br. 487/2013 (ATP 4 CLP)

Uredba (EZ) br. 944/2013 (ATP 5 CLP)

Uredba (EZ) br. 605/2014 (ATP 6 CLP)

Uredba (EZ) br. 2015/1221 (ATP 7 CLP)

Uredba (EZ) br. 2016/918 (ATP 8 CLP)

Uredba (EZ) br. 2016/1179 (ATP 9 CLP)

Uredba (EZ) br. 2017/776 (ATP 10 CLP)

Uredba (EZ) br. 2018/669 (ATP 11 CLP)

Uredba (EZ) br. 2018/1480 (ATP 13 CLP)

Uredba (EZ) br. 2019/521 (ATP 12 CLP)

Uredba (EZ) br. 2020/217 (ATP 14 CLP)

Uredba (EZ) br. 2020/1182 (ATP 15 CLP)

Uredba (EZ) br. 2021/643 (ATP 16 CLP)

Uredba (EZ) br. 2021/849 (ATP 17 CLP)

Uredba (EZ) br. 2022/692 (ATP 18 CLP)

Uredba (EZ) br. 2020/878

Normativ 648/2004/EC.

Ograničenja u vezi s proizvodom ili sastojcima u skladu s Prilogom XVII Uredbe (EZ-a) 1907/2006 (REACH) i naknadne izmene:

Ograničenja koja se odnose na proizvod: 3

Ograničenja koja se odnose na sadržane supstance: 75

Napomene koje se odnose na Direktivu EZ 2012/18 (Seveso III):

Nijedan

Prekursori eksploziva – Uredba 2019/1148

No substances listed

Uredba (EU) br. 649/2012 (PIC uredba)

Nema navedenih supstanci

Nemačka klasa opasnosti po vodu
Klasa 1: blago opasno za vodu.

Немачки пропис према ТРГС 510 (Lagerklasse)
LGK 10

SVHC supstance:
Ne SVHC supstance prisutne u koncentraciji >= 0,1%.

15.2. Procena bezbednosti hemikalije
Nije izvršena procena hemijske sigurnosti za mix.

Supstance za koje je izvršena procena hemijske sigurnosti:
bis-[4-(2,3-epoxipropoxi)phenyl]propane
Propylene carbonate
oxirane, mono[(c12-14-alkyloxy)methyl] derivs.
Cashew, nutshell liq.

Poglavlje 16. Ostali podaci

Šifra	Opis
H302	Štetno ako se proguta.
H312	Štetno u kontaktu sa kožom.
H315	Izaziva iritaciju kože.
H317	Može da izazove alergijske reakcije na koži.
H318	Dovodi do teškog oštećenja oka.
H319	Dovodi do jake iritacije oka.
H360F	Može štetno da utiče na plodnost.
H411	Toksično po živi svet u vodi sa dugotrajnim posledicama.
H412	Štetno za živi svet u vodi sa dugotrajnim posledicama.

Šifra	Klasa i kategorija opasnosti	Opis
3.1/4/Dermal	Acute Tox. 4	Akutna toksičnost (dermalna), Kategorija 4
3.1/4/Oral	Acute Tox. 4	Akutna toksičnost (oralna), Kategorija 4
3.2/2	Skin Irrit. 2	Iritacija kože, Kategorija 2
3.3/1	Eye Dam. 1	Teško oštećenje oka, Kategorija 1
3.3/2	Eye Irrit. 2	Iritacija oka, Kategorija 2
3.4.2/1	Skin Sens. 1	Senzibilizacija kože, Kategorija 1
3.4.2/1A	Skin Sens. 1A	Senzibilizacija kože, Kategorija 1A
3.4.2/1B	Skin Sens. 1B	Senzibilizacija kože, Kategorija 1B
3.7/1B	Repr. 1B	Reproduktivna toksičnost, Kategorija 1B
4.1/C2	Aquatic Chronic 2	Hronična (dugotrajna) opasnost po vodenu životnu sredinu, kategorija 2
4.1/C3	Aquatic Chronic 3	Hronična (dugotrajna) opasnost po vodenu životnu sredinu, kategorija 3

Klasifikacija i procedure korišćene za izvođenje klasifikacije smeša na osnovu Uredbe (EZ) 1272/2008 [CLP]:

Klasifikacija u skladu sa Uredbom (EZ) br. 1272/2008	Procedura klasifikacije
Skin Irrit. 2, H315	Metod izračunavanja
Eye Irrit. 2, H319	Metod izračunavanja
Skin Sens. 1A, H317	Metod izračunavanja
Aquatic Chronic 3, H412	Metod izračunavanja
Repr. 1B, H360F	Metod izračunavanja

Ovaj dokument izradila je tehnički kompetentna osoba za SDS, koja je prikladno za to osposobljena.

Glavni bibliografski izvori:

ECDIN - Mreža podataka i informacija o hemijskim sredstvima za životnu sredinu - Zajednički istraživački centar, Komisija Evropskih zajednica

SAX's OPASNE OSOBINE INDUSTRIJSKIH MATERIJA- Osmo izdanje - Van Nostrand Reinold

Ovde objavljene informacije se temelje na našem znanju u vreme gore navedenog datuma. Odnose se samo na navedene proizvode i ne predstavlja garanciju nekog određenog kvaliteta.

Obaveza je korisnika da utvrdi da je ova informacija celovita i da odgovara specifičnoj upotrebi.

Ovaj MSDS poništava i zamjenjuje sva predhodna izdanja.

Legenda skraćenica i akronima, korišćenih u bezbednosnom listu.

ACGIH: Američka konferencija vladinih industrijskih higijeničara (ACGIH)

ADR: Evropski sporazum o međunarodnoj razmeni opasnih dobara drumom.

AND: Evropskog sporazuma koje se odnose na međunarodni prevoz opasnih materija po vodene tokove u kopno

ATE: Procena akutne toksičnosti

ATEmix: Procenjena vrednost akutne toksičnosti (Mešavine)

BCF: Faktor biološke koncentracije

BEI: Indeks biološke izloženosti

BOD: Potražnja za biohemijskim kiseonikom

CAS: CAS registarski broj (Američko hemijsko društvo).

CAV: Centar za otrove

CE: Evropska zajednica

CLP: Klasifikacija, označavanje, pakovanje.

CMR: Kancerogeni, mutageni i reprotoksični

COD: Potražnja za hemijskim kiseonikom

COV: Nestabilno organsko jedinjenje

CSA: Procena hemijske bezbednosti

CSR: Izveštaj o hemijskoj bezbednosti

DMEL: Izvedeni minimalni nivo efekta

DNEL: Izvedeni nivo bez uticaja.

DPD: Direktiva o opasnim preparatima

DSD: Direktiva o opasnim supstancama

EC50: Polovina maksimalno efektivne koncentracije

ECHA: Evropska agencija za hemikalije

EINECS: Evropski sadržaj postojećih komercijalnih hemijskih supstanci.

ES: Scenario izloženosti

GefStoffVO: Propis o opasnim supstancama, Nemačka.

GHS: Globalno usklađen sistem klasifikacije i označavanja hemikalija.

IARC: Međunarodna agencija za istraživanje kancera

IATA: Međunarodno udruženje vazdušnog prevoza.

IATA-DGR: Propis o opasnostima dobara prema međunarodnom udruženju za vazdušni prevoz (IATA).

IC50: Polovina maksimalno inhibitorne koncentracije

ICAO: Organizacija međunarodnog civilnog vazduhoplovstva.

ICAO-TI: Tehnička uputstva prema organizaciji međunarodnog civilnog vazduhoplovstva (ICAO).

IMDG: Međunarodni pomorski kodeks opasnih dobara.

INCI: Međunarodna nomenklatura kozmetičkih sastojaka.

IRCCS: Naučni institut za istraživanje, hospitalizaciju i zdravstvenu zaštitu

KAFH: Keep Away From Heat

KSt: Koeficijent eksplozije.

LC50: Koncentracija smrtnosti u 50% ispitane populacije.

LD50: Doza smrtnosti u 50% ispitane populacije.

LDLo: Mala smrtonosna doza

N.A.: Nije primenjivo

N/A: Nije primenjivo

N/D: Nije definisano / Nije dostupno

NA: Nije dostupan

NIOSH: Narodni institut za bezbednost na radu i zdravlje

NOAEL: Nema posmatranog nivoa neželjenih efekata

OSHA: Zaštita na radu i nega zdravlja

PBT: Postojan, bioakumulativan i toksičan

PGK: Uputstvo za pakovanje

PNEC: Predviđena neuticajna koncentracija.

PSG: Putnici

RID: Propis o međunarodnom prevozu opasnih dobara prugom.

STEL: Granica kratkotrajne izloženosti.

STOT: Toksičnost za ciljani organ.

TLV: Granična vrednost praga.

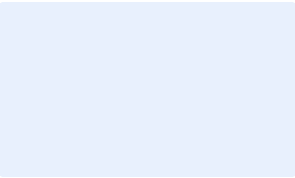
TWATLV: Granična vrednost praga za vremenski određen prosek. (ACGIH standard)

vPvB: Veoma postojan, vrlo bioakumulativan.

WGK: Nemačka klasifikacija opasnosti za vodu.

Odlomci promenjeni u odnosu na prethodnu reviziju:

- Poglavlje 1. Identifikacija hemikalije i podaci o licu koje stavlja hemikaliju u promet
- Poglavlje 2. Identifikacija opasnosti
- Poglavlje 3. Sastav/Podaci o sastojcima
- Poglavlje 8. Kontrola izloženosti i lična zaštita
- Poglavlje 11. Toksikološki podaci
- Poglavlje 16. Ostali podaci



Exposure Scenario

Propylene carbonate

Exposure Scenario, 07/06/2021

Substance identity	
	Propylene carbonate
CAS No.	108-32-7
INDEX No.	607-194-00-1
EINECS No.	203-572-1
Registration number	01-2119537232-48

Table of contents

1. **ES 1** Widespread use by professional workers; Adhesives, sealants (PC1)

1. ES 1

Widespread use by professional workers; Adhesives, sealants (PC1)

1.1 TITLE SECTION

Exposure Scenario name	Use in rigid foams, coatings, adhesives and sealants
Date - Version	07/06/2021 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	Adhesives, sealants (PC1)

Environment Contributing Scenario

CS1	ERC8a
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Worker Contributing Scenario

CS2 Hand application - finger paints, pastels, adhesives	PROC19
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1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario (ERC8a)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a)
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*Product (article) characteristics***Physical form of product:**

Liquid, vapour pressure < 10 Pa (Standard Temperature and Pressure)

Vapour pressure:

= 6 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

*Amount used, frequency and duration of use (or from service life)***Amounts used:**

Application rate = 35000 kg/ha

Release type: Continuous release**Emission days:** 365 days per year*Technical and organisational conditions and measures***Control measures to prevent releases**

	Air - minimum efficiency of: = 100 % Water - minimum efficiency of: = 100 %
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*Other conditions affecting environmental exposure***Local marine water dilution factor:** 100**Local freshwater dilution factor:** 10**Receiving surface water flow:** 18000 m³/day

Indoor use

1.2. CS2: Worker Contributing Scenario: Hand application - finger paints, pastels, adhesives (PROC19)

Process Categories	Manual activities involving hand contact (PROC19)		
<i>Product (article) characteristics</i>			
Physical form of product: Liquid, vapour pressure < 10 Pa (Standard Temperature and Pressure)			
Vapour pressure: = 6 Pa			
Concentration of substance in product: Covers percentage substance in the product up to 100 %.			
<i>Amount used, frequency and duration of use/exposure</i>			
Duration: Covers use up to = 480 min/day			
Frequency: Covers frequency up to: = 5 days per week			
<i>Technical and organisational conditions and measures</i>			
Technical and organisational measures			
Provide a good standard of controlled ventilation (5 to 10 air changes per hour).		Inhalation - minimum efficiency of: = 70 %	
<i>Conditions and measures related to personal protection, hygiene and health evaluation</i>			
Personal protection			
Wear suitable face shield. Wear chemically resistant gloves (tested to EN374) in combination with specific activity training.		Dermal - minimum efficiency of: = 80 %	
<i>Other conditions affecting worker exposure</i>			
Indoor use Professional use Temperature: Covers use at ambient temperatures. 20°C			
1.3 Exposure estimation and reference to its source			
1.3. CS1: Environment Contributing Scenario (ERC8a)			
protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
Man via environment - Oral	N/A	ECETOC TRA environment v3	= 0.000933
1.3. CS2: Worker Contributing Scenario: Hand application - finger paints, pastels, adhesives (PROC19)			
Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	= 5.4857 mg/kg bw/day	ECETOC TRA worker v3	= 0.274286
inhalative, systemic, long-term	= 23.7781 mg/m ³	ECETOC TRA worker v3	= 0.336992
1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES			
Guidance to check compliance with the exposure scenario: Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least			

equivalent levels.

Exposure Scenario

bis-[4-(2,3-epoxipropoxy)phenyl]propane

Exposure Scenario, 07/06/2021

Substance identity	
	bis-[4-(2,3-epoxipropoxy)phenyl]propane
CAS No.	1675-54-3
INDEX No.	603-073-00-2
EINECS No.	216-823-5
Registration number	01-2119456619-26

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1. **ES 1** Widespread use by professional workers; ESC2_0000001

1. ES 1 Widespread use by professional workers; ESC2_0000001	
1.1 TITLE SECTION	
Exposure Scenario name	Professional application of coatings and inks - Etching agent - Resins (prepolymers) - Adhesion promotor
Date - Version	27/05/2021 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	ESC2_0000001
Article Category(ies)	Other articles made of stone, plaster, cement, glass or ceramic (AC4g)
Environment Contributing Scenario	
CS1	ERC8c - ERC8f
Worker Contributing Scenario	
CS2 Material transfers	PROC8a
CS3 Rolling, Brushing	PROC10
CS4 Roller, spreader, flow application	PROC11
CS5 Mixing operations - Manual	PROC19
1.2 Conditions of use affecting exposure	
1.2. CS1: Environment Contributing Scenario (ERC8c, ERC8f)	
Environmental release categories	Widespread use leading to inclusion into/onto article (indoor) - Widespread use leading to inclusion into/onto article (outdoor) (ERC8c, ERC8f)
<i>Product (article) characteristics</i>	
Physical form of product: Liquid, vapour pressure < 0,5 kPa at STP	
Concentration of substance in product: Covers percentage substance in the product up to 100 %.	
<i>Amount used, frequency and duration of use (or from service life)</i>	
Amounts used: Daily amount per site = 175 kg/day	
Release type: Continuous release	
Emission days: 365 days per year	
<i>Technical and organisational conditions and measures</i>	
Control measures to prevent releases Provide onsite wastewater removal efficiency of ³ (%):	
<i>Conditions and measures related to sewage treatment plant</i>	
STP type: Municipal Sewage Treatment Plant	
STP effluent (m³/day): 2	
<i>Conditions and measures related to treatment of waste (including article waste)</i>	
Waste treatment Dispose of waste cans and containers according to local regulations.	
<i>Other conditions affecting environmental exposure</i>	

Local marine water dilution factor: 100
Local freshwater dilution factor: 10
Receiving surface water flow: 18000 m³/day
Covers indoor and outdoor use

1.2. CS2: Worker Contributing Scenario: Material transfers (PROC8a)

Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)
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Product (article) characteristics

Physical form of product:

Liquid, vapour pressure < 0,5 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Avoid carrying out activities involving exposure for more than 4 hours per day.

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

Personal protection

Wear chemically resistant gloves (tested to EN374) in combination with "basic" employee training.

Other conditions affecting worker exposure

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

1.2. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Process Categories	Roller application or brushing (PROC10)
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Product (article) characteristics

Physical form of product:

Liquid, vapour pressure < 0,5 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Avoid carrying out activities involving exposure for more than 4 hours per day.

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

Personal protection

Wear chemically resistant gloves (tested to EN374) in combination with "basic" employee training.

Other conditions affecting worker exposure

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

1.2. CS4: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Process Categories	Non industrial spraying (PROC11)
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Product (article) characteristics

Physical form of product:

Liquid, vapour pressure < 0,5 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure**Duration:**

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures**Technical and organisational measures**

Avoid carrying out activities involving exposure for more than 4 hours per day.

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

Wear chemically resistant gloves (tested to EN374) in combination with "basic" employee training.

Wear suitable face shield.

Wear an impervious suit.

Wear a respirator conforming to EN140.

Other conditions affecting worker exposure

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

1.2. CS5: Worker Contributing Scenario: Mixing operations - Manual (PROC19)**Process Categories**

Manual activities involving hand contact (PROC19)

Product (article) characteristics**Physical form of product:**

Liquid, vapour pressure < 0,5 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure**Duration:**

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures**Technical and organisational measures**

Avoid carrying out activities involving exposure for more than 1 hour per day.

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

Wear chemically resistant gloves (tested to EN374) in combination with "basic" employee training.

Other conditions affecting worker exposure

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

1.3 Exposure estimation and reference to its source**1.3. CS1: Environment Contributing Scenario (ERC8c, ERC8f)**

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater	= 0.0022 mg/L	EUSES	= 0.00022
marine sediment	= 0.00127 mg/L	EUSES	= 0.0128
freshwater sediment	= 0.012 mg/L	EUSES	= 0.0369
marine water	= 2.34E-05 mg/L	EUSES	= 0.029
soil	= 0.00142 mg/kg dry weight	EUSES	= 0.00722

1.3. CS2: Worker Contributing Scenario: Material transfers (PROC8a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 0.84 mg/m ³	ECETOC TRA worker v2.0	0.07
dermal, systemic, long-term	= 0.2742 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.03

1.3. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 5E-07 mg/m ³	ECETOC TRA worker v2.0	< 0.001
dermal, systemic, long-term	= 2.743 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.33

1.3. CS4: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 0.36 mg/m ³	ECETOC TRA worker v2.0	0.03
dermal, systemic, long-term	= 2.68 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.32

1.3. CS5: Worker Contributing Scenario: Mixing operations - Manual (PROC19)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 2E-07 mg/m ³	ECETOC TRA worker v2.0	< 0.001
dermal, systemic, long-term	= 1.414 mg/kg bw/day	ECETOC TRA worker v3	< 0.42
combined routes, systemic, long-term	N/A	ECETOC TRA worker v3	= 0.42

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

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

Exposure Scenario

oxirane, mono[(c12-14-alkyloxy)methyl] derivs.

Exposure Scenario, 08/06/2021

Substance identity	
	oxirane, mono[(c12-14-alkyloxy)methyl] derivs.
CAS No.	68609-97-2
INDEX No.	603-103-00-4
EINECS No.	271-846-8
Registration number	01-2119485289-22

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1. **ES 1** Widespread use by professional workers; Various products (PC1, PC9a, PC9b)

1. ES 1		Widespread use by professional workers; Various products (PC1, PC9a, PC9b)	
1.1 TITLE SECTION			
Exposure Scenario name	Professional application of coatings and inks by brush or roller - Professional application of coatings and inks		
Date - Version	07/04/2021 - 1.0		
Life Cycle Stage	Widespread use by professional workers		
Main user group	Professional uses		
Sector(s) of use	Professional uses (SU22)		
Product Categories	Adhesives, sealants (PC1) - Coatings and paints, thinners, paint removers (PC9a) - Fillers, putties, plasters, modelling clay (PC9b)		
Environment Contributing Scenario			
CS1		ERC8c	
Worker Contributing Scenario			
CS2 Mixing operations		PROC5	
CS3 Large surfaces - Surfaces - Rolling, Brushing		PROC10	
CS4 Large surfaces - Surfaces - Roller, spreader, flow application		PROC11	
CS5 Large surfaces - Surfaces - Rolling, Brushing		PROC19	
1.2 Conditions of use affecting exposure			
1.2. CS1: Environment Contributing Scenario (ERC8c)			
Environmental release categories	Widespread use leading to inclusion into/onto article (indoor) (ERC8c)		
Product (article) characteristics			
Physical form of product: Liquid, vapour pressure < 0,5 kPa at STP			
Amount used, frequency and duration of use (or from service life)			
Release type: Intermittent release			
1.2. CS2: Worker Contributing Scenario: Mixing operations (PROC5)			
Process Categories	Mixing or blending in batch processes (PROC5)		
Product (article) characteristics			
Physical form of product: Liquid, vapour pressure < 0,5 kPa at STP			
Concentration of substance in product: Covers percentage substance in the product up to 25 %.			
Amount used, frequency and duration of use/exposure			
Duration: Covers daily exposures up to 8 hours			
Technical and organisational conditions and measures			
Technical and organisational measures Ensure operatives are trained to minimise exposures. Avoid direct eye contact with product, also via contamination on hands.			
Conditions and measures related to personal protection, hygiene and health evaluation			
Personal protection Wear suitable gloves tested to EN374.			

Other conditions affecting worker exposure	
Indoor use Professional use Temperature: Covers use at ambient temperatures. Body parts exposed: Assumes that potential dermal contact is limited to hands and forearms.	
1.2. CS3: Worker Contributing Scenario: Large surfaces - Surfaces - Rolling, Brushing (PROC10)	
Process Categories	Roller application or brushing (PROC10)
Product (article) characteristics	
Physical form of product: Liquid, vapour pressure < 0,5 kPa at STP	
Concentration of substance in product: Covers percentage substance in the product up to 25 %.	
Amount used, frequency and duration of use/exposure	
Duration: Covers daily exposures up to 8 hours	
Technical and organisational conditions and measures	
Technical and organisational measures Ensure operatives are trained to minimise exposures. Provide extract ventilation to points where emissions occur. Avoid direct eye contact with product, also via contamination on hands. Use long handled brushes and rollers.	
Conditions and measures related to personal protection, hygiene and health evaluation	
Personal protection Wear suitable gloves tested to EN374. Wear a respirator conforming to EN140.	
Other conditions affecting worker exposure	
Indoor use Professional use Temperature: Covers use at ambient temperatures.	
1.2. CS4: Worker Contributing Scenario: Large surfaces - Surfaces - Roller, spreader, flow application (PROC11)	
Process Categories	Non industrial spraying (PROC11)
Product (article) characteristics	
Physical form of product: Liquid, vapour pressure < 0,5 kPa at STP	
Concentration of substance in product: Covers percentage substance in the product up to 100 %.	
Amount used, frequency and duration of use/exposure	
Duration: Covers daily exposures up to 8 hours	
Frequency: For each use, avoid using for more than < 4 h/event	
Technical and organisational conditions and measures	
Technical and organisational measures Ensure operatives are trained to minimise exposures. Provide extract ventilation to points where emissions occur. Avoid direct eye contact with product, also via contamination on hands. Use long handled brushes and rollers. Other skin protection measures such as impervious suits and face shields may be required during high dispersion activities which are likely to lead to substantial aerosol release, e.g. spraying.	
Conditions and measures related to personal protection, hygiene and health evaluation	

Personal protection Wear suitable gloves tested to EN374. Wear a respirator conforming to EN140.															
<i>Other conditions affecting worker exposure</i>															
Indoor use Professional use Temperature: Covers use at ambient temperatures.															
1.2. CS5: Worker Contributing Scenario: Large surfaces - Surfaces - Rolling, Brushing (PROC19)															
Process Categories		Manual activities involving hand contact (PROC19)													
<i>Product (article) characteristics</i>															
Physical form of product: Liquid, vapour pressure < 0,5 kPa at STP															
Concentration of substance in product: Covers percentage substance in the product up to 25 %.															
<i>Amount used, frequency and duration of use/exposure</i>															
Duration: Covers daily exposures up to 8 hours															
Frequency: For each use, avoid using for more than < 1 h/event															
<i>Technical and organisational conditions and measures</i>															
Technical and organisational measures Ensure operatives are trained to minimise exposures. Provide extract ventilation to points where emissions occur. Avoid direct eye contact with product, also via contamination on hands. Use long handled brushes and rollers.															
<i>Conditions and measures related to personal protection, hygiene and health evaluation</i>															
Personal protection Wear suitable gloves tested to EN374.															
<i>Other conditions affecting worker exposure</i>															
Indoor use Professional use Temperature: Covers use at ambient temperatures.															
1.3 Exposure estimation and reference to its source															
1.3. CS2: Worker Contributing Scenario: Mixing operations (PROC5)															
<table border="1"> <thead> <tr> <th>Exposure route, Health effect, Exposure indicator</th> <th>Exposure level</th> <th>Calculation method</th> <th>Risk Characterization Ratio (RCR)</th> </tr> </thead> <tbody> <tr> <td>inhalative, systemic, long-term</td> <td>= 9.3 mg/m³</td> <td>ECETOC TRA worker v2.0</td> <td>= 0.674</td> </tr> <tr> <td>dermal, systemic, long-term</td> <td>= 0.007 mg/kg bw/day</td> <td>ECETOC TRA worker v2.0</td> <td>= 0.002</td> </tr> </tbody> </table>				Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)	inhalative, systemic, long-term	= 9.3 mg/m ³	ECETOC TRA worker v2.0	= 0.674	dermal, systemic, long-term	= 0.007 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.002
Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)												
inhalative, systemic, long-term	= 9.3 mg/m ³	ECETOC TRA worker v2.0	= 0.674												
dermal, systemic, long-term	= 0.007 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.002												
Additional information on exposure estimation: If repeated and/or prolonged skin exposure to the substance is likely, then wear suitable gloves tested to EN374.															
1.3. CS3: Worker Contributing Scenario: Large surfaces - Surfaces - Rolling, Brushing (PROC10)															
<table border="1"> <thead> <tr> <th>Exposure route, Health effect, Exposure indicator</th> <th>Exposure level</th> <th>Calculation method</th> <th>Risk Characterization Ratio (RCR)</th> </tr> </thead> <tbody> </tbody> </table>				Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)								
Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)												

inhalative, local, short-term	= 2.325 mg/m ³	ECETOC TRA worker v2.0	= 0.168
dermal, systemic, long-term	= 0.137 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.035

Additional information on exposure estimation:

If repeated and/or prolonged skin exposure to the substance is likely, then wear suitable gloves tested to EN374.

1.3. CS4: Worker Contributing Scenario: Large surfaces - Surfaces - Roller, spreader, flow application (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, local, short-term	= 0.36 mg/m ³	ECETOC TRA worker v2.0	= 0.03
dermal, systemic, long-term	= 2.68 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.32

Additional information on exposure estimation:

If repeated and/or prolonged skin exposure to the substance is likely, then wear suitable gloves tested to EN374.

1.3. CS5: Worker Contributing Scenario: Large surfaces - Surfaces - Rolling, Brushing (PROC19)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, local, long-term	= 2E-07 mg/m ³	ECETOC TRA worker v2.0	< 0.001
dermal, systemic, long-term	= 1.414 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.42

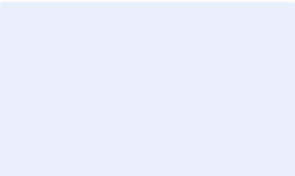
Additional information on exposure estimation:

If repeated and/or prolonged skin exposure to the substance is likely, then wear suitable gloves tested to EN374.

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

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



Exposure Scenario

Cashew, nutshell liq.

Exposure Scenario, 08/06/2021

Substance identity	
	Cashew, nutshell liq.
CAS No.	8007-24-7
EINECS No.	232-355-4
Registration number	01-2119502450-57

Table of contents

1. **ES 1** Widespread use by professional workers; Various products (PC9b, PC9a, PC1)

1. ES 1		Widespread use by professional workers; Various products (PC9b, PC9a, PC1)	
1.1 TITLE SECTION			
Exposure Scenario name	Dye - Professional application of coatings and inks by brush or roller - Use in rigid foams, coatings, adhesives and sealants		
Date - Version	21/05/2021 - 1.0		
Life Cycle Stage	Widespread use by professional workers		
Main user group	Professional uses		
Sector(s) of use	Professional uses (SU22)		
Product Categories	Fillers, putties, plasters, modelling clay (PC9b) - Coatings and paints, thinners, paint removers (PC9a) - Adhesives, sealants (PC1)		
Article Category(ies)	Stone, plaster, cement, glass and ceramic articles: Large surface area articles (AC4a) - Other articles made of stone, plaster, cement, glass or ceramic (AC4g)		
Environment Contributing Scenario			
CS1	ERC8c - ERC8f		
Worker Contributing Scenario			
CS2 Mixing operations	PROC19		
CS3 Equipment cleaning and maintenance - (aqueous) - Material transfers	PROC8b		
CS4 Equipment cleaning and maintenance - Large surfaces - Surfaces - Rolling, Brushing - Finishing operations - (aqueous)	PROC10		
1.2 Conditions of use affecting exposure			
1.2. CS1: Environment Contributing Scenario (ERC8c, ERC8f)			
Environmental release categories	Widespread use leading to inclusion into/onto article (indoor) - Widespread use leading to inclusion into/onto article (outdoor) (ERC8c, ERC8f)		
<i>Product (article) characteristics</i>			
Physical form of product: Liquid			
Concentration of substance in product: Covers percentage substance in the product up to 1 %.			
<i>Amount used, frequency and duration of use (or from service life)</i>			
Amounts used: < 50 t(onnes)/year < 167 kg/day			
Release type: Intermittent release			
Emission days: 365 days per year			
<i>Conditions and measures related to sewage treatment plant</i>			
STP type: Municipal Sewage Treatment Plant Water - minimum efficiency of: = 93.2 %			
<i>Conditions and measures related to treatment of waste (including article waste)</i>			
Waste treatment Residues which cannot be recycled are disposed off as chemical waste			
<i>Other conditions affecting environmental exposure</i>			
Local marine water dilution factor: 100 Local freshwater dilution factor: 10			

Receiving surface water flow: 18000 m ³ /day Covers indoor and outdoor use	
1.2. CS2: Worker Contributing Scenario: Mixing operations (PROC19)	
Process Categories	Manual activities involving hand contact (PROC19)
<i>Product (article) characteristics</i>	
Physical form of product: Liquid	
Concentration of substance in product: Covers percentage substance in the product up to 1 %.	
<i>Amount used, frequency and duration of use/exposure</i>	
Amounts used: < 50 t(tonnes)/year	
Duration: Covers daily exposures up to 8 hours	
<i>Technical and organisational conditions and measures</i>	
Technical and organisational measures Ensure operatives are trained to minimise exposures. Avoid direct eye contact with product, also via contamination on hands.	
<i>Conditions and measures related to personal protection, hygiene and health evaluation</i>	
Personal protection Wear suitable gloves tested to EN374. Wear suitable coveralls to prevent exposure to the skin. Use eye protection according to EN 166. Wear a respirator conforming to EN140.	
<i>Other conditions affecting worker exposure</i>	
Covers indoor and outdoor use Professional use Temperature: Covers use at ambient temperatures.	
1.2. CS3: Worker Contributing Scenario: Equipment cleaning and maintenance - (aqueous) - Material transfers (PROC8b)	
Process Categories	Transfer of substance or mixture (charging and discharging) at dedicated facilities (PROC8b)
<i>Product (article) characteristics</i>	
Physical form of product: Liquid, vapour pressure < 0,5 kPa at STP	
Concentration of substance in product: Covers percentage substance in the product up to 25 %.	
<i>Amount used, frequency and duration of use/exposure</i>	
Duration: Covers daily exposures up to 8 hours	
Frequency: Avoid using product more than = 4 h/event	
<i>Technical and organisational conditions and measures</i>	
Technical and organisational measures Ensure operatives are trained to minimise exposures. Avoid direct eye contact with product, also via contamination on hands.	
<i>Conditions and measures related to personal protection, hygiene and health evaluation</i>	
Personal protection Wear suitable gloves tested to EN374.	
<i>Other conditions affecting worker exposure</i>	

Indoor use

Professional use

Temperature: Covers use at ambient temperatures.

1.2. CS4: Worker Contributing Scenario: Equipment cleaning and maintenance - Large surfaces - Surfaces - Rolling, Brushing - Finishing operations - (aqueous) (PROC10)

Process Categories Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure < 0,5 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Frequency:

Avoid using product more than = 4 h/event

Technical and organisational conditions and measures

Technical and organisational measures

Ensure operatives are trained to minimise exposures.

Provide extract ventilation to points where emissions occur.

Avoid direct eye contact with product, also via contamination on hands.

Use long handled brushes and rollers.

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

Personal protection

Wear suitable gloves tested to EN374.

Wear a respirator conforming to EN140.

Other conditions affecting worker exposure

Indoor use

Professional use

Temperature: Covers use at ambient temperatures.

1.3 Exposure estimation and reference to its source

1.3. CS1: Environment Contributing Scenario (ERC8c, ERC8f)

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
N/A	N/A	N/A	< 1

1.3. CS2: Worker Contributing Scenario: Mixing operations (PROC19)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative	N/A	ECETOC TRA worker v2.0	< 1
dermal	N/A	ECETOC TRA worker v2.0	< 1

1.3. CS3: Worker Contributing Scenario: Equipment cleaning and maintenance - (aqueous) - Material transfers (PROC8b)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 7.75 mg/m ³	ECETOC TRA worker v2.0	= 0.562

dermal, systemic, long-term	= 0.014 mg/m ³	ECETOC TRA worker v2.0	= 0.004
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1.3. CS4: Worker Contributing Scenario: Equipment cleaning and maintenance - Large surfaces - Surfaces - Rolling, Brushing - Finishing operations - (aqueous) (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, local, short-term	= 2.325 mg/m ³	ECETOC TRA worker v2.0	= 0.168
dermal, systemic, long-term	= 0.137 mg/m ³	ECETOC TRA worker v2.0	= 0.035

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

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

Liste bezbednosnih mera

Sukladan pravilniku (EU) br. 1907/2006. (REACH), Čl. 31. Prilog 31 te naknadnim usklađivanjima uvedenim pravilnikom komisije (EU) br. 2020./878

SUPERFLEX (B)

Datum prvog izdanja: 4.5.2021.

Zastarele liste bezbednosnih mera 16.5.2023.

Verzija 12

POGLAVLJE 1: Identifikacija supstance/mešavine i podaci o pravnoj ili fizičkoj osobi

1.1. Identifikator proizvoda

Identifikacija preparata:

Trgovačko ime: SUPERFLEX (B)

Trgovački kod: B0277 .021

1.2. Odgovarajuće prepoznate namene supstanci ili mešavine i upotrebe koje nisu preporučljive

Preporučena upotreba: Products for the polymerisation of resins and foams (includes curing agents, hardeners, cross-linkers)

Upotreba koja nije preporučljiva Načini upotrebe koji su drugačiji od preporučenih

1.3. Detalji o dobavljaču bezbednosnog lista

Proizvođač: KERAKOLL S.p.A.

Via dell'Artigianato, 9

41049 Sassuolo (MODENA) - ITALY

Tel.+39 0536 816511 Fax. +39 0536816581

safety@kerakoll.com

1.4. Brojevi telefona za vanredna stanja

Centar za trovanje - Naziv bolnice 1 - Grad - Telefon (raspoložive informacije)

POGLAVLJE 2: Identifikacija opasnosti



2.1. Razvrstavanje supstanci ili mešavine

Uredba (EC) br. 1272/2008 (CLP)

Skin Corr. 1B Izaziva teške opekotine na koži i teške povrede očiju.

Eye Dam. 1 Izaziva teške povrede očiju.

Skin Sens. 1A Može izazvati alergijsku reakciju na koži.

Aquatic Chronic 3 Štetno za vodene organizme na koje ostavlja dugotrajne posledice.

Fizicko-hemijski efekti po ljudsko zdravlje i okolinu:

Nema ostalih rizika

2.2. Elementi označavanja

Uredba (EC) br. 1272/2008 (CLP)

Piktogrami i Signal reči



Opasnost

Obaveštenje o opasnosti

H314 Izaziva teške opekotine na koži i teške povrede očiju.

H317 Može izazvati alergijsku reakciju na koži.

H412 Štetno za vodene organizme na koje ostavlja dugotrajne posledice.

Mere opreza

P102 Držite van dometa dece.

P280 Nositi zaštitne rukavice i zaštitu za oči.

P302+P352 U SLUČAJU KONTAKTA SA KOŽOM: Isperite sa dosta vode.

P305+P351+P338 AKO DOSPE U OČI: pažljivo ispirati vodom nekoliko minuta. Ukloniti kontaktne sočiva, ukoliko postoje i
8 ukoliko je to moguće učiniti. Nastaviti sa ispiranjem.

P501 Odložite proizvod/ambalažu u skladu sa važećim propisima.

Sadržaj:

3-aminomethyl-3,5,5-trimethylcyclohexylamine
Fatty acids, c18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine
Reaction product of fatty acids, C18 alkyl with amines, polyethylenepoly-tetraethylenepentamine fraction
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)
M-phenylenebis(methylamine)
pentactylenhexamine
Amines, polyethylenepoly-, triethylenetetramine fraction
Phenol, styrenated

Posebne odredbe prema Prilogu XVII REACH-a i naknadnih amandmana:

Nijedan

2.3. Ostale opasnosti

Ne sadrži PBT, vPvB ili endokrino disruptivne supstance prisutne u koncentraciji >= 0,1%.

Ostali rizici: Nema ostalih rizika

POGLAVLJE 3: Sastav/informacije o sastojcima

3.1. Supstance

N.A.

3.2. Mešavine

Identifikacija preparata: SUPERFLEX (B)

Opasni sastojci u smislu CLP Uredbe koja se odnosi na razvrstavanje:

Količina	Ime	Ident. Broj.	Klasifikacija	Broj registriranih slučajeva
5-9,9 %	Benzyl alcohol	CAS:100-51-6 EC:202-859-9 Index:603-057-00-5	Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2, H319	01-2119492630-38
2,5-4,9 %	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)	CAS:113930-69-1 EC:500-302-7	Skin Corr. 1B, H314; Skin Sens. 1, H317; Aquatic Chronic 2, H411	01-2119965162-39
2,5-4,9 %	2,4,6-tris(dimethylaminomethyl)phenol	CAS:90-72-2 EC:202-013-9 Index:603-069-00-0	Acute Tox. 4, H302; Skin Corr. 1C, H314; Eye Dam. 1, H318	01-2119560597-27
2,5-4,9 %	titanium dioxide	CAS:13463-67-7 EC:236-675-5 Index:022-006-00-2	Carc. 2, H351	
2,5-4,9 %	Fatty acids, c18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	CAS:68082-29-1 EC:500-191-5	Skin Irrit. 2, H315; Eye Dam. 1, H318; Aquatic Chronic 2, H411; Skin Sens. 1A, H317, M-Chronic:1	01-2119972320-44
2,5-4,9 %	Reaction product of fatty acids, C18 alkyl with amines, polyethylenepoly-tetraethylenepentamine fraction	EC:701-046-0	Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1A, H317; Aquatic Chronic 2, H411, M-Chronic:1	01-2119972321-42
1-2,4 %	3-aminomethyl-3,5,5-trimethylcyclohexylamine	CAS:2855-13-2 EC:220-666-8 Index:612-067-00-9	Skin Corr. 1B, H314; Acute Tox. 4, H302; Skin Sens. 1A, H317; Eye Dam. 1, H318	01-2119514687-32
1-2,4 %	1,3-Benzenedimethanamine, reaction products with glycidyl tolyl ether	CAS:90194-04-0 EC:290-611-0	Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1, H317; Aquatic Chronic 2, H411	01-2120770491-54
< 1 %	Amines, polyethylenepoly-, tetraethylenepentamine fraction	CAS:90640-66-7 EC:292-587-7	Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Corr. 1B, H314; Skin	01-2119487290-37

< 1 %	POLYETHYLENE POLYAMINE, PENTAETHYLENEHEXAMINE FRACTION	EC:701-266-7	Sens. 1,1A,1B, H317; Eye Dam. 1, H318; Aquatic Chronic 2, H411
< 0,5 %	Phenol, styrenated	CAS:61788-44-1 EC:262-975-0	Skin Corr. 1B, H314; Acute Tox. 4, 01-2119485826-22 H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 1, H410, EUH071
< 0,5 %	Amines, polyethylenepoly-, triethylenetetramine fraction	CAS:90640-67-8 EC:292-588-2 Index:612-059-00-5	Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 2, H411; Eye Irrit. 2, H319, M-Chronic:1
< 0,2 %	Benzyltrimethylamine	CAS:103-83-3 EC:203-149-1 Index:612-074-00-7	Acute Tox. 4, H312; Acute Tox. 4, H302; Skin Corr. 1B, H314; Skin Sens. 1, H317; Aquatic Chronic 3, H412; Eye Dam. 1, H318
< 0,2 %	Salicylic acid	CAS:69-72-7 EC:200-712-3	Flam. Liq. 3, H226; Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Eye Dam. 1, H318; Acute Tox. 3, H331; Aquatic Chronic 2, H411
< 0,2 %	Salicylic acid	CAS:69-72-7 EC:200-712-3	Acute Tox. 4, H302; Eye Dam. 1, H318; Repr. 2, H361d

POGLAVLJE 4: Mere prve pomoći

4.1. Opis mera prve pomoći

U slučaju kontakta sa kožom:

Odmah skinuti svu kontaminiranu odeću.

ODMAH NAZVATI MEDICINSKU EKIPU ZA HITNU POMOĆ

Smesta skinuti kontaminiranu odeću i ukloniti je na bezbedan način.

U slučaju kontakta sa kožom, odmah isprati sa dosta vode i sapuna

U slučaju kontakta sa očima:

U slučaju kontakta sa očima, ispirati oči vodom neko vreme, držati otvorene kapke, a potom zatražiti pomoć oftalmologa.

Zaštititi nepovređeno oko

U slučaju gutanja:

Ne uključuje povraćanje, potražiti medicinsku pomoć I pokazati SDS I oznaku opasnosti

U slučaju udisanja:

Izloženu osobu izneti na svež vazuh i držati je utopljen u stanju mirovanja

4.2 Najvažniji simptomi i dejstva, akutni i odloženi

Nadraživanje očiju

Oštećenje očiju

Nadraživanje kože

Eritem

4.3. Naznaka za potrebom hitne lekarske pomoći i posebnog tretmana

U slučaju nesreće ili slabosti odmah se obratiti lekaru (ako je moguće, pokazati uputstvo za upotrebu ili sigurnosni list).

POGLAVLJE 5: Protivpožarne mere

5.1. Sredstva za gašenje

Moguća sredstva za gašenje požara:

Voda.

Ugljen dioksid (CO₂).

Sredstva za gašenje požara koja se ne smeju koristiti zbog bezbednosnih razloga:

Nijedan određen

5.2 Posebne opasnosti koje proizilaze iz substance ili mešavine

Ne udisati gasove koji nastanu usled eksplozije i sagorevanja.

Sagorevanjem se oslobađaju teški dimovi.

5.3. Saveti za vatrogasce

Koristiti odgovarajuće aparate za disanje

Posebno pokupiti vodu koja je korišćena za gašenje požara i kontaminirana. Ona se ne sme baciti u kanizacionu mrežu.

Neoštećene kanistere ukloniti iz prostora neposredne opasnosti, ukoliko se to može uraditi na bezbedan način.

POGLAVLJE 6: Mere kod slučajnog ispuštanja

6.1. Lične mere opreza, zaštitna oprema i procedure u slučaju opasnosti

Koristiti sredstva za ličnu zaštitu.
Prebaciti osobe na sigurno mesto.
Videti mere zaštite pod tačkama 7. i 8.

6.2 Mere zaštite okoline:

Sprečiti prodiranje u zemlju/dublje slojeve zemlje. Sprečiti ulivanje u površinske vode ili u kanalizacionu mrežu.
Zadržati kontaminiranu vodu koja je korišćena za pranje, pa je ukloniti.
U slučaju curenja gasa ili prodiranja u vodene tokove, zemlju ili kanalizacionu mrežu, obavestiti nadležne službe.
Odgovarajući materijal za prikupljanje: upijajući materijal, organski materijal, pesak

6.3. Metode i materijali za zadržavanje i čišćenje

Odgovarajući materijal za prikupljanje: upijajući materijal, organski materijal, pesak
Isprati sa dosta vode.

6.4. Pogledati ostala poglavlja

Pogledati takođe i poglavlja 8. i 13.

POGLAVLJE 7: Rukovanje i skladištenje

7.1. Mere opreza za bezbedno rukovanje

Izbegavati kontakt s kožom i očima, udisanje pare i magle.
Ne koristiti prazan kontejner pre nego što bude očišćen.
Pre operacije prenosa, uveriti se da ne postoje nekompatibilni ostaci materijala u kontejneru.
Kontaminiranu odeću zameniti pre ulaska u prostoriju za ručavanje.
Ne konzumirati hranu i piće na radnom mestu.
Pogledati Poglavlje 8 u vezi s preporučenom opremom za zaštitu.

7.2. Uslovi za bezbedno skladištenje, uključujući i nekompatibilnosti

Nekompatibilni materijali:
Nijedna posebno.
Uputstva za prostorije za skladištenje:
Adekvatno provetrene prostorije.

7.3. Specifične krajnje primene

Preporuka(e)
Nijedna posebno.
Specifična rešenja za industrijski sektor:
Nijedna posebno.

POGLAVLJE 8: Kontrola izloženosti / lična zaštita

8.1. Kontrolni parametri

Lista komponenti sa OEL vrednošću

Sastojak	OEL Tip	Zemlja	Plafon	'Dugoroč no mg/m3'	Dugoroč no ppm	Skraćeni ca mg/m3	Skraćeni ca ppm	Napomen
Calcium Carbonate	NATIONAL	AUSTRALIA		10.000				This value is for inhalable dust containing no asbestos and <1 % crystalline silica.
	NATIONAL	FRANCE		10.000				
	NATIONAL	HUNGARY		10.000				
	NATIONAL	IRELAND		10.000				Inhalable fraction
	NATIONAL	IRELAND		4.000				Respirable fraction
	NATIONAL	LATVIA		6.000				
	NATIONAL	POLAND		10.000				
	NATIONAL	SWITZERLAND		3.000				respirable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND		10.000				inhalable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN		4.000				respirable aerosol

		AND NORTHERN IRELAND					
	NATIONAL	BELGIUM	10.000				
	NATIONAL	CROATIA	10.000				
	NATIONAL	NETHERLA NDS	10.000				
	NATIONAL	PORTUGAL	10.000				
	NATIONAL	SPAIN	10.000				
Kaolin	NATIONAL	AUSTRALIA	10.000				This value is for inhalable dust containing no asbestos and < 1% crystalline silica.
	NATIONAL	BELGIUM	2.000				
	NATIONAL	DENMARK	2.000	4.000			Respirable aerosol
	NATIONAL	FINLAND	2.000				Respirable fraction
	NATIONAL	FRANCE	10.000				Respirable aerosol
	NATIONAL	IRELAND	2.000				
	NATIONAL	SWITZERLA ND	3.000				Respirable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	2.000				Respirable aerosol
	NATIONAL	POLAND	10.000				inhalable fraction Dz. U. 2018 poz. 1286 wraz z późn. zm.
Benzyl alcohol	NATIONAL	FINLAND	45.000	10.000			
	NATIONAL	GERMANY	22.000	5.000	44.000	10.000	AGS; Long term and short term: inhalable fraction
	NATIONAL	GERMANY	22.000	5.000	44.000	10.000	DFG; Long term and short term: inhalable fraction
	NATIONAL	LATVIA	5.000				
	NATIONAL	SWITZERLA ND	5.000	22.000			
	NATIONAL	BULGARIA	5.000				
	NATIONAL	CZECHIA	40.000		80.000		
	NATIONAL	LITHUANIA	5.000				
	NATIONAL	POLAND	240.000				Dz. U. 2018 poz. 1286 wraz z późn. zm
titanium dioxide	NATIONAL	SLOVENIA	22.000	5.000	44.000	10.000	
	NATIONAL	AUSTRALIA	10				
	NATIONAL	BELGIUM	10.000				
	NATIONAL	DENMARK	6.000		12.000		Long term and short term: total dust
	NATIONAL	FRANCE	11.000				Inhalable aerosol
	NATIONAL	GERMANY	0.300		2.400		DFG; Long term and short term: excluding ultrafine particles; respirable fraction; multiplied by the material density;
	NATIONAL	IRELAND	10.000				Inhalable fraction
	NATIONAL	IRELAND	8.000				Respirable fraction
	NATIONAL	LATVIA	10.000				
	NATIONAL	POLAND	10.000		30.000		Dz. U. 2018 poz. 1286 wraz z późn. zm

Benzyltrimethylamine	NATIONAL	ROMANIA	10.000	15.000		
	NATIONAL	SPAIN	10.000			Inhalable aerosol
	NATIONAL	SWEDEN	5.000			Inhalable aerosol
	NATIONAL	SWITZERLAND	3.000			Respirable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10.000			Inhalable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	4.000			Respirable aerosol
	NATIONAL	AUSTRIA	5.000	10.000		
	NATIONAL	BULGARIA	10.000			
	NATIONAL	CROATIA	10.000			total dust
	NATIONAL	CROATIA	4.000			respirable dust
	NATIONAL	GREECE	10.000			
	NATIONAL	GREECE	50.000			
	NATIONAL	GREECE	5.000			
	NATIONAL	LITHUANIA	5.000			
	NATIONAL	PORTUGAL	10.000			
	NATIONAL	SLOVAKIA	5.000			
	NATIONAL	SLOVENIA	6.000			
	ACGIH	NNN	10.000			A4 - LRT irr
	NATIONAL	BULGARIA	5.000			
	NATIONAL	LATVIA	5.000			
Aluminium oxide	NATIONAL	ROMANIA	5.000	0.900	10.000	1.800
	NATIONAL	FRANCE	10.000			Respirable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10.000			Inhalable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	4.000			Respirable aerosol
	NATIONAL	AUSTRALIA	10.000			Inhalable dust containing no asbestos and < 1% crystalline silica
	NATIONAL	AUSTRIA	10.000	20.000		Long term: inhalable fraction; Short term: inhalable fraction, 60 minutes average value
	NATIONAL	AUSTRIA	5.000	10.000		Long term: respirable fraction; Short term: respirable fraction, 60 minutes average value
	NATIONAL	DENMARK	5.000	10.000		Calculated as Al; Long term and Short term: inhalable aerosol

Silicon dioxide; synthetic amorphous silicon dioxide	NATIONAL	DENMARK	2.000		4.000		Calculated as Al; Long term and Short term: respirable aerosol
	NATIONAL	GERMANY	4.000				Inhalable aerosol
	NATIONAL	GERMANY	1.500				Respirable aerosol
	NATIONAL	HUNGARY	6.000				Respirable aerosol
	NATIONAL	IRELAND	10.000				Inhalable fraction
	NATIONAL	IRELAND	4.000				Respirable fraction
	NATIONAL	LATVIA	6.000				
	NATIONAL	POLAND	2.500		16.000		Dz. U. 2018 poz. 1286 wraz z późn. zm
	NATIONAL	POLAND	1.200				Aluminium trioxide as Al fume; Long term: respirable dust
	NATIONAL	ROMANIA	2.000	0.500	5.000	1.200	Long term and short term: aerosol
	NATIONAL	SPAIN	10.000				Inhalable aerosol
	NATIONAL	SPAIN	5.000				Respirable aerosol
	NATIONAL	SWEDEN	5.000				Inhalable aerosol
	NATIONAL	SWEDEN	2.000				Respirable aerosol
	NATIONAL	SWITZERLAND	3.000				Respirable aerosol
	NATIONAL	AUSTRALIA	2.000				This value is for inhalable dust containing no asbestos and < 1% crystalline silica
	NATIONAL	AUSTRIA	4.000				Inhalable aerosol
	NATIONAL	BELGIUM	10.000				
	NATIONAL	DENMARK	2.000		4.000		Inhalable aerosol
	NATIONAL	FINLAND	5.000				
	NATIONAL	GERMANY	4.000				AGS; Inhalable aerosol
	NATIONAL	GERMANY	4.000				DFG; Inhalable aerosol
	NATIONAL	IRELAND	6.000				Inhalable fraction
	NATIONAL	IRELAND	2.400				Respirable fraction
	NATIONAL	LATVIA	1.000				
	NATIONAL	SWITZERLAND	4.000				Inhalable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	6.000				Inhalable aerosol
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	2.400				Respirable aerosol
	NATIONAL	ESTONIA	2.000				
	NATIONAL	SLOVENIA	4.000				Inhalable fraction

Granične vrednosti izloženosti za PNEC

Sastojak	CAS-No.	PNEC limit	Put izlaganja	Učestalost izlaganja
Benzyl alcohol	100-51-6	1.000 mg/l	Slatka voda	
		0.100 mg/l	Morska voda	
		5.270 mg/kg	Slatkovodni sedimenti	
		0.527 mg/kg	Седименти морске воде	

2,4,6-tris (dimethylaminomethyl) phenol	90-72-2	2.300 mg/l	Iskusna isturenost (slatka voda)
		39.000 mg/l	Микроорганизми у третману отпадних вода
		0.456 mg/kg	Земљиште
		84.000 µg/l	Slatka voda
		840.000 µg/l	Iskusna isturenost (slatka voda)
titanium dioxide	13463-67-7	8.400 µg/l	Morska voda
		200.000 µg/l	Микроорганизми у третману отпадних вода
		0.184 mg/l	Slatka voda
		0.018 mg/l	Morska voda
		1.000 mg/kg	Iskusna isturenost (slatka voda)
Fatty acids, c18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	68082-29-1	100.000 mg/kg	Iskrena ispusna voda (morska voda)
		100.000 mg/kg	Микроорганизми у третману отпадних вода
		4.340 µg/l	Slatka voda
		43.400 µg/l	Iskusna isturenost (slatka voda)
		434.000 ng/L	Morska voda
Reaction product of fatty acids, C18 alkyl with amines, polyethylenepoly-tetraethylenepentamine fraction		3.840 mg/l	Микроорганизми у третману отпадних вода
		434.020 mg/kg	Slatkovodni sedimenti
		43.400 mg/kg	Седименти морске воде
		86.780 mg/kg	Земљиште
		2.630 µg/l	Slatka voda
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	26.300 µg/l	Iskusna isturenost (slatka voda)
		263.000 ng/L	Morska voda
		7.210 mg/l	Микроорганизми у третману отпадних вода
		263.010 mg/kg	Slatkovodni sedimenti
		26.301 mg/kg	Седименти морске воде
		58.580 mg/kg	Земљиште
		60.000 µg/l	Slatka voda
		6.000 µg/l	Morska voda
		5.784 mg/kg	Slatkovodni sedimenti
		578.000 µg/kg	Седименти морске воде
		1.121 mg/kg	Земљиште (пољопривредно)
		0.230 mg/l	Iskusna isturenost (slatka voda)

		3.180 mg/l	Микроорганизми у третману отпадних вода
Amines, polyethylenepoly-, tetraethylenepentamine fraction	90640-66-7	6.800 µg/l	Slatka voda
		68.000 µg/l	Iskusna isturenost (slatka voda)
		680.000 ng/L	Morska voda
		4.600 mg/l	Микроорганизми у третману отпадних вода
		341.000 µg/kg	Slatkovodni sedimenti
		764.000 µg/kg	Седименти морске воде
		274.000 µg/kg	Земљиште
		230.000 µg/kg	Sekundarno trovanje
Phenol, styrenated	61788-44-1	30.000 µg/l	Slatka voda
		46.000 µg/l	Iskusna isturenost (slatka voda)
		3.000 µg/l	Morska voda
		4.600 µg/l	Iskrena ispusna voda (morska voda)
		36.200 mg/l	Микроорганизми у третману отпадних вода
		1.860 mg/kg	Slatkovodni sedimenti
		186.000 µg/kg	Седименти морске воде
		355.000 µg/kg	Земљиште
Amines, polyethylenepoly-, triethylenetetramine fraction	90640-67-8	26.800 µg/l	Slatka voda
		200.000 µg/l	Iskusna isturenost (slatka voda)
		2.680 µg/l	Morska voda
		20.000 µg/l	Iskrena ispusna voda (morska voda)
		130.000 µg/l	Микроорганизми у третману отпадних вода
		8.572 mg/kg	Slatkovodni sedimenti
		857.200 µg/kg	Седименти морске воде
		1.250 mg/kg	Земљиште
Benzylidimethylamine	103-83-3	4.800 µg/l	Slatka voda
		13.400 µg/l	Iskusna isturenost (slatka voda)
		480.000 ng/L	Morska voda
		534.000 mg/l	Микроорганизми у третману отпадних вода
		71.000 µg/kg	Slatkovodni sedimenti
		7.100 µg/kg	Седименти морске воде
		11.400 µg/kg	Земљиште
Salicylic acid	69-72-7	200.000 µg/l	Slatka voda
		1.000 mg/l	Iskusna isturenost (slatka voda)
		20.000 µg/l	Morska voda
		162.000 mg/l	Микроорганизми у третману отпадних вода

1.420 mg/kg	Slatkovodni sedimenti
142.000 µg/kg	Седименти морске воде
166.000 µg/kg	Земљиште

Izvedeni nivo Bez Efekata. (DNEL)

Sastojak	CAS-No.	Radnička industrija	Stručni radnik	Potrošač	Put izlaganja	Učestalost izlaganja
Benzyl alcohol	100-51-6		22.000 mg/m³	8.100 mg/m³	Ljudska udisajna	Dugoročni, sistemski efekti
			450.000 mg/m³	40.500 mg/m³	Ljudska udisajna	Kratkoročni, sistemski efekti
			9.500 mg/kg	5.700 mg/kg	Ljudska dermalna	Dugoročni, sistemski efekti
			47.000 mg/kg	28.500 mg/kg	Ljudska dermalna	Kratkoročni, sistemski efekti
				5.000 mg/kg	Ljudska oralna	Dugoročni, sistemski efekti
				25.000 mg/kg	Ljudska oralna	Kratkoročni, sistemski efekti
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis (methylaniline)	113930-69-1		493.000 µg/m³	74.000 µg/m³	Ljudska udisajna	Dugoročni, sistemski efekti
			6.990 mg/m³	1.500 mg/m³	Ljudska udisajna	Kratkoročni, sistemski efekti
			140.000 µg/kg	50.000 µg/kg	Ljudska dermalna	Dugoročni, sistemski efekti
				50.000 µg/kg	Ljudska oralna	Dugoročni, sistemski efekti
				990.000 µg/kg	Ljudska oralna	Kratkoročni, sistemski efekti
titanium dioxide	13463-67-7		10.000 mg/m³		Ljudska udisajna	Dugoročni, lokalni efekti
Fatty acids, c18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	68082-29-1		3.900 mg/m³	970.000 µg/m³	Ljudska udisajna	Dugoročni, sistemski efekti
			1.100 mg/kg	560.000 µg/kg	Ljudska dermalna	Dugoročni, sistemski efekti
				560.000 µg/kg	Ljudska oralna	Dugoročni, sistemski efekti
Reaction product of fatty acids, C18 alkyl with amines, polyethylenepolytetraethylenepentamine fraction			3.900 mg/m³	970.000 µg/m³	Ljudska udisajna	Dugoročni, sistemski efekti
			1.100 mg/kg	560.000 µg/kg	Ljudska dermalna	Dugoročni, sistemski efekti
				560.000 µg/kg	Ljudska oralna	Dugoročni, sistemski efekti
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2		20.100 mg/m³		Ljudska udisajna	Kratkoročni, sistemski efekti
			20.100 mg/m³		Ljudska udisajna	Kratkoročni, lokalni efekti

Amines, polyethylenepoly-, tetraethylenepentamine fraction	90640-66-7	1.290 mg/m ³	526.000 µg/kg	Ljudska oralna	Dugoročni, sistemski efekti
			380.000 µg/m ³	Ljudska udisajna	Dugoročni, sistemski efekti
			6940.000 mg/m ³	Ljudska udisajna	Kratkoročni, sistemski efekti
			740.000 µg/kg	Ljudska dermalna	Dugoročni, sistemski efekti
			10.000 mg/kg	Ljudska dermalna	Kratkoročni, sistemski efekti
			0.036 mg/cm ²	Ljudska dermalna	Dugoročni, lokalni efekti
			1.290 mg/cm ²	Ljudska dermalna	Kratkoročni, sistemski efekti
			530.000 µg/kg	Ljudska oralna	Dugoročni, sistemski efekti
Phenol, styrenated	61788-44-1	7.400 mg/m ³	26.000 mg/kg	Ljudska oralna	Kratkoročni, sistemski efekti
			1.310 mg/m ³	Ljudska udisajna	Dugoročni, sistemski efekti
			2.100 mg/kg	Ljudska dermalna	Dugoročni, sistemski efekti
Amines, polyethylenepoly-, triethylenetetramine fraction	90640-67-8	540.000 µg/m ³	750.000 µg/kg	Ljudska oralna	Dugoročni, sistemski efekti
			96.000 µg/m ³	Ljudska udisajna	Dugoročni, sistemski efekti
Benzyldimethylamine	103-83-3	14.600 mg/m ³	140.000 µg/kg	Ljudska oralna	Dugoročni, sistemski efekti
			43.700 mg/m ³	Ljudska udisajna	Dugoročni, sistemski efekti
			2.300 mg/kg	Ljudska dermalna	Dugoročni, sistemski efekti
			1.250 mg/kg	Ljudska oralna	Dugoročni, sistemski efekti
			1.000 mg/m ³	Ljudska udisajna	Dugoročni, lokalni efekti
Salicylic acid	69-72-7	16.000 mg/m ³	4.000 mg/m ³	Ljudska udisajna	Dugoročni, sistemski efekti
			0.200 mg/m ³	Ljudska udisajna	Dugoročni, lokalni efekti
			2.000 mg/kg	Ljudska dermalna	Dugoročni, sistemski efekti
			1.000 mg/kg	Ljudska oralna	Dugoročni, sistemski efekti
			4.000 mg/kg	Ljudska oralna	Kratkoročni, sistemski efekti

8.2. Kontrola izloženosti

Zaštita očiju:

Наочаре са бочном заштитом.

Zaštita kože:

Nositi odeću koja će garantovani potpunu zaštitu kože, npr. od pamuka, gume, PVC-a i vitona.

Zaštita za ruke:

Nitril guma.
Zaštita pri disanju:
N.A.
Toplotni rizici:
N.A.
Kontrola izlaganja u okruženje:
N.A.
Higijenske i tehničke mere
N.A.

POGLAVLJE 9: Fizička i hemijska svojstva

9.1. Podaci o osnovnim fizičkim i hemijskim svojstvima

fizičko stanje: Tečnost
Boja: 6eo
Miris: N.A.
Prag mirisa: N.A.
pH: Nije relevantno
Kinematička viskoznost: N.A.
Tačka topljenja/smrzavanja: N.A.
Početna tačka ključanja i vreme ključanja: N.A.
Temperatura zapaljenja: > 93°C
Gornja/donja granica zapaljivosti ili eksplozije: N.A.
Gustina pare: N.A.
Pritisak pare: N.A.
Relativna gustina: 1.78 g/cm³
Rastvorljivost u vodi: N.A.
Rastvorljivost u ulju: N.A.
Koeficijent raspodele (n-oktanol/voda): N.A.
Temperatura samozapaljenja: N.A.
Temperatura razlaganja: N.A.
Zapaljivost: N.A.
Isparljiva organska jedinjenja - VOC = 11.36 % ; 202.13 g/l

Karakteristike čestica:

Veličina čestice: N.A.

9.2. Ostale informacije

Mogućnost mešanja: N.A.
Provodljivost: N.A.
Brzina isparavanja: N.A. Nema drugih relevantnih informacija

POGLAVLJE 10: Stabilnost I reaktivnost

10.1. Reaktivnost

Stabilan u normalnim uslovima

10.2. Hemijska stabilnost

Podaci nisu dostupni.

10.3. Mogućnost opasnih reakcija

Nijedan.

10.4 Uslovi koji treba izbegavati

Stabilno u normalnim uslovima

10.5. Nekompatibilni materijali

Nijednu pojedinačno.

10.6. Opasni proizvodi raspada

Nijedan.

POGLAVLJE 11: Podaci o toksičnosti

11.1. Informacija o klasama opasnosti prema Uredbi (EC) No 1272/2008

Toksikološki podaci o proizvodu:

- | | |
|----------------------------------|--|
| a) akutna toksičnost | Nije klasifikovano
Na osnovu raspoloživih podataka nisu ispunjeni kriterijumi klasifikacije |
| b) kožno nagrizanje/nadraživanje | Proizvod je klasifikovan: Skin Corr. 1B(H314) |
| c) teške očne povrede/teško očno | Proizvod je klasifikovan: Eye Dam. 1(H318) |

nadraživanje

d) izazivanje kožne ili disajne preosetljivosti	Proizvod je klasifikovan: Skin Sens. 1A(H317)
e) mutagenost zametnih stanica	Nije klasifikovano Na osnovu raspoloživih podataka nisu ispunjeni kriterijumi klasifikacije
f) kancerogenost	Nije klasifikovano Na osnovu raspoloživih podataka nisu ispunjeni kriterijumi klasifikacije
g) reproduktivna toksičnost	Nije klasifikovano Na osnovu raspoloživih podataka nisu ispunjeni kriterijumi klasifikacije
h) Specifična toksičnost za ciljne organe (STOT) jednokratno izlaganje	Nije klasifikovano Na osnovu raspoloživih podataka nisu ispunjeni kriterijumi klasifikacije
i) Specifična toksičnost za ciljne organe (STOT) ponovljeno izlaganje	Nije klasifikovano Na osnovu raspoloživih podataka nisu ispunjeni kriterijumi klasifikacije
j) opasnost u slučaju udisanja	Nije klasifikovano Na osnovu raspoloživih podataka nisu ispunjeni kriterijumi klasifikacije

Toksikološki podaci o osnovnim supstancama izdvojenim iz proizvoda:

Benzyl alcohol	a) akutna toksičnost	LD50 Oralno Pacov = 1620.00 mg/kg LC50 Inhalacija aerosola Pacov > 4178.00000 mg/m ³ 4h LD50 Koža Zec > 2000.00000 mg/kg 24h LC50 Udisanje magle Pacov = 4.18 mg/l 4h	
	b) kožno nagrizanje/nadraživanje	Nadražuje kožu Zec Negativno	
	c) teške očne povrede/teško očno nadraživanje	Nadražuje oči Zec Da 24h	
	d) izazivanje kožne ili disajne preosetljivosti	Čini kožu preosetljivom Negativno	Mouse
	f) kancerogenost	Genotoksičnost Negativno Kancerogenost Oralno Pacov Negativno	Mouse
	g) reproduktivna toksičnost	Nije uočeno štetno dejstvo Oralno = 200.00000 mg/kg	Mouse
	b) kožno nagrizanje/nadraživanje	Nagriza kožu Čovek Pozitivno	
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis (methylamine)			
2,4,6-tris (dimethylaminomethyl) phenol	a) akutna toksičnost	LD50 Oralno Pacov = 2169.00000 mg/kg LD50 Koža Pacov > 1.00000 ml/kg 6h	
	b) kožno nagrizanje/nadraživanje	Nagriza kožu Zec Pozitivno 4h	
	c) teške očne povrede/teško očno nadraživanje	Nadražuje oči Zec Da	
	d) izazivanje kožne ili disajne preosetljivosti	Čini kožu preosetljivom Zamorac Negativno	

	g) reproduktivna toksičnost	Nije uočeno dejstvo Oralno Pacov = 15.00000 mg/kg	
titanium dioxide	a) akutna toksičnost	LD50 Oralno Pacov > 5000.00 mg/kg LC50 Udisanje > 6.82 mg/l	
	d) izazivanje kožne ili disajne preosetljivosti	Čini kožu preosetljivom Negativno	
	i) Specifična toksičnost za ciljne organe (STOT) ponovljeno izlaganje	Nije uočeno štetno dejstvo 1000.00	
Fatty acids, c18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	a) akutna toksičnost	LD50 Oralno Pacov > 2000.00000 mg/kg	
		LD50 Koža Pacov > 2000.00000 mg/kg 24h	
	c) teške očne povrede/teško očno nadraživanje	Nadražuje oči Da 1h	
	d) izazivanje kožne ili disajne preosetljivosti	Nagriza oči Zec Pozitivno Čini kožu preosetljivom Pozitivno	Mouse
	g) reproduktivna toksičnost	Nije uočeno štetno dejstvo Oralno Pacov = 1000.00000 mg/kg	
Reaction product of fatty acids, C18 alkyl with amines, polyethylenepoly-tetraethylenepentamine fraction	a) akutna toksičnost	LD50 Oralno Pacov > 2000.00000 mg/kg	
		LD50 Koža Pacov > 2000.00000 mg/kg 24h	
	b) kožno nagrizanje/nadraživanje	Nadražuje kožu Negativno	
	c) teške očne povrede/teško očno nadraživanje	Nagriza oči Pozitivno	
	d) izazivanje kožne ili disajne preosetljivosti	Čini kožu preosetljivom Pozitivno	Mouse
1,3-Benzenedimethanamine, reaction products with glycidyl tolyl ether	a) akutna toksičnost	LD50 Oralno Pacov > 300.00 mg/kg	
		ATE Oralno = 30003.00 mg/kg	
	b) kožno nagrizanje/nadraživanje	Nadražuje kožu Čovek Pozitivno	
	c) teške očne povrede/teško očno nadraživanje	Nagriza oči Pozitivno	
	d) izazivanje kožne ili disajne preosetljivosti	Čini kožu preosetljivom	
	e) mutagenost zametnih stanica	Genotoksičnost Negativno Genotoksičnost Pacov Negativno	

	g) reproduktivna toksičnost	Nije uočeno štetno dejstvo Pacov = 25.00 mg/kg	General Toxicity - Parent: 25 mg/kg body weight
	i) Specifična toksičnost za ciljane organe (STOT) ponovljeno izlaganje	Nije uočeno štetno dejstvo Oralno Pacov = 15.00 mg/kg	Dose: 5, 15 and 25 mg/kg
3-aminomethyl-3,5,5-trimethylcyclohexylamine	a) akutna toksičnost	LD50 Oralno Pacov = 1030.00000 mg/kg	
		LC50 Inhalacija aerosola Pacov > 5.01000 mg/l 4h	
		LD50 Koža Pacov > 2000.00000 mg/kg	
	b) kožno nagrizanje/nadraživanje	Nagrizava kožu Zec Pozitivno	
	c) teške očne povrede/teško očno nadraživanje	Nadražuje oči Zec Da	
	d) izazivanje kožne ili disajne preosetljivosti	Čini kožu preosetljivom Zamorac Pozitivno	
	f) kancerogenost	Genotoksičnost Negativno Kancerogenost Negativno	Mouse, oral route
Amines, polyethylenepoly-, tetraethylenepentamine fraction	a) akutna toksičnost	LD50 Oralno Pacov = 1861.90000 mg/kg	
		LD50 Koža Zec = 1465.40000 mg/kg 24h	
	b) kožno nagrizanje/nadraživanje	Nagrizava kožu Zec Pozitivno	
	c) teške očne povrede/teško očno nadraživanje	Nadražuje oči Zec Da	
	d) izazivanje kožne ili disajne preosetljivosti	Čini kožu preosetljivom Zamorac Pozitivno	
	f) kancerogenost	Genotoksičnost Negativno	Mouse intraperitoneal route
	g) reproduktivna toksičnost	Reproduktivna toksičnost Oralno Pacov Negativno	
Phenol, styrenated	a) akutna toksičnost	LD50 Oralno Pacov >= 2000.00000 mg/kg LC50 Inhalacija aerosola Pacov > 4.92000 mg/l 4h LD50 Koža Pacov > 2000.00000 mg/kg 24h	
	b) kožno nagrizanje/nadraživanje	Nadražuje kožu Zec Pozitivno	
	c) teške očne povrede/teško očno nadraživanje	Nadražuje oči Zec Ne 24h	
	d) izazivanje kožne ili disajne preosetljivosti	Čini kožu preosetljivom Pozitivno	Mouse
	f) kancerogenost	Genotoksičnost Negativno	Mouse oral route
	g) reproduktivna toksičnost	Nije uočeno štetno dejstvo Oralno Pacov = 124.00000 mg/kg	
Amines, polyethylenepoly-, triethylenetetramine fraction	a) akutna toksičnost	LD50 Oralno Pacov = 1716.20000 mg/kg	
	b) kožno nagrizanje/nadraživanje	LD50 Koža Zec = 1465.40000 mg/kg 24h Nagrizava kožu Zec Pozitivno	

	c) teške očne povrede/teško očno nadraživanje	Nadražuje oči Zec Da	
	d) izazivanje kožne ili disajne preosetljivosti	Čini kožu preosetljivom Zamorac Pozitivno	
	f) kancerogenost	Genotoksičnost Negativno Kancerogenost Koža = 50.00000 mg/kg	Mouse intraperitoneal rout Mouse NOAEL
Benzyl dimethylamine	a) akutna toksičnost	LD50 Oralno Pacov = 0.65000 ml/kg LC50 Udisanje Pacov = 373.00000 ppm 4h LD50 Koža Zec = 1.66000 ml/kg 24h	
	b) kožno nagrizanje/nadraživanje	Nagriza kožu Zec Pozitivno	
	c) teške očne povrede/teško očno nadraživanje	Nadražuje oči Zec Da 24h	
	d) izazivanje kožne ili disajne preosetljivosti	Čini kožu preosetljivom Zamorac Negativno	
	f) kancerogenost	Genotoksičnost Negativno	Mouse oral route
	g) reproduktivna toksičnost	Nije uočeno štetno dejstvo Oralno Pacov = 150.00000 mg/kg	
Salicylic acid	a) akutna toksičnost	LD50 Oralno Pacov = 891.00000 mg/kg LD50 Koža Pacov > 2000.00000 mg/kg 24h	
	b) kožno nagrizanje/nadraživanje	Nadražuje kožu Zec Negativno 4h	
	c) teške očne povrede/teško očno nadraživanje	Nagriza oči Zec Pozitivno	
	d) izazivanje kožne ili disajne preosetljivosti	Čini kožu preosetljivom Zamorac Negativno	
	f) kancerogenost	Genotoksičnost Negativno Kancerogenost Oralno Pacov Negativno	Mouse oral route
	g) reproduktivna toksičnost	Nije uočeno štetno dejstvo Oralno Pacov = 75.00000 mg/kg	

11.2. Informacija o drugim opasnostima

Endokrino disruptivna svojstva:

Bez endokrino disruptivnih supstanci prisutnih u koncentraciji $\geq 0.1\%$

POGLAVLJE 12: Ekološki podaci

12.1. Toksičnost

Primeniti dobru radnu praksu da se proizvod ne oslobađa u okolinu.

Eko-Toksikološki podaci:

Štetno za vodene organizme na koje ostavlja dugotrajne posledice.

Ekotoksikološka svojstva proizvoda

Proizvod je klasifikovan: Aquatic Chronic 3(H412)

Lista komponenti sa eko-toksikološkim svojstvima

Sastojak	Ident. Broj.	Ekotoksik. Informacije
Benzyl alcohol	CAS: 100-51-6 -	a) Akutna toksičnost na vodene organizme : LC50 Riba Oryzias latipes = 460.00000 mg/L 96h OECD SIDS (2001)
	EINECS: 202-859-9 - INDEX: 603-057-00-5	b) Hronična toksičnost na vodene organizme : NOEC Riba = 48.89700 mg/L ECOSAR QSAR
		a) Akutna toksičnost na vodene organizme : LC50 Dafinija Daphnia magna =

		230.00000 mg/L 48h OECD SIDS (2001)
		b) Hronična toksičnost na vodene organizme : NOEC Dafinija Daphnia magna = 51.00000 mg/L OECD Guideline 211
		a) Akutna toksičnost na vodene organizme : EC50 Alge Pseudokirchnerella subcapitata = 770.00000 mg/L 72h OECD SIDS on Benzoates (2001)
		c) Bakterijska toksičnost : EC50 Nitrosomonas = 390.00000 mg/L
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)	CAS: 113930-69-1 - EINECS: 500-302-7	a) Akutna toksičnost na vodene organizme : LC50 Riba Oncorhynchus mykiss = 64.00000 mg/L 96h „OECD Guideline 203 (Fish, Acute Toxicity Test)
		a) Akutna toksičnost na vodene organizme : LC50 Dafinija Daphnia magna <= 1.46000 mg/L 48h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
		a) Akutna toksičnost na vodene organizme : EC50 Alge Pseudokirchneriella subcapitata = 30.00000 mg/L 72h „OECD Guideline 201 (Alga, Growth Inhibition Test)
		a) Akutna toksičnost na vodene organizme : EC50 Sludge activated sludge = 888.90000 mg/L 3h „OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
2,4,6-tris(dimethylaminomethyl)phenol	CAS: 90-72-2 - EINECS: 202-013-9 - INDEX: 603-069-00-0	a) Akutna toksičnost na vodene organizme : LC50 Riba Cyorinus carpio = 175.00000 mg/L 96h
		a) Akutna toksičnost na vodene organizme : LC50 Salmo gairdneri < 240.00 mg/L 96h
		a) Akutna toksičnost na vodene organizme : LC50 Dafinija Palemonetes vulgaris = 718.00 mg/L 96h
		a) Akutna toksičnost na vodene organizme : EC50 Alge freshwater algae = 84.00 mg/L
titanium dioxide	CAS: 13463-67-7 - EINECS: 236-675-5 - INDEX: 022-006-00-2	a) Akutna toksičnost na vodene organizme : LC50 Riba Pimephales promelas (Cavedano americano) > 1000.00 mg/L 96h
		a) Akutna toksičnost na vodene organizme : EC50 Alge Pseudokirchneriella subcapitata (alghe cloroficee) > 100.00 mg/L 72h
		a) Akutna toksičnost na vodene organizme : NOEC Alge = 5600.00 mg/L
		a) Akutna toksičnost na vodene organizme : EC50 Dafinija Daphnia magna (Pulce d'acqua grande) > 100.00 mg/L 48h
Fatty acids, c18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	CAS: 68082-29-1 - EINECS: 500-191-5	a) Akutna toksičnost na vodene organizme : LC50 Riba = 10.00 mg/L 96h
		a) Akutna toksičnost na vodene organizme : EC100 Dafinija = 10.00 mg/L 24h
		a) Akutna toksičnost na vodene organizme : EC50 Alge = 4.34 mL/L 72h
Reaction product of fatty acids, C18 alkyl with amines, polyethylenepoly-tetraethylenepentamine fraction	EINECS: 701-046-0	a) Akutna toksičnost na vodene organizme : LC50 Riba Zebrafish = 7.07000 mg/L 96h OECD 203
		a) Akutna toksičnost na vodene organizme : LC50 Dafinija Daphnia magna = 5.18000 mg/L 48h OECD 202
		a) Akutna toksičnost na vodene organizme : EC50 Alge Pseudokirchneriella subcapitata = 2.63000 mg/L 72h OECD 201
		a) Akutna toksičnost na vodene organizme : EC50 Sludge Activated sludge = 721.00000 mg/L 3h OECD 209
		c) Bakterijska toksičnost : NOEC 1.41000 mg/L
3-aminomethyl-3,5,5-trimethylcyclohexylamine	CAS: 2855-13-2 - EINECS: 220-	a) Akutna toksičnost na vodene organizme : LC50 Riba Leuciscus idus = 110.00000 mg/L 96h „according to 84/449/EEC, C.1, 1984

		a) Akutna toksičnost na vodene organizme : EC50 Dafinija Daphnia magna = 23.00000 mg/L 48h OECD 202 a) Akutna toksičnost na vodene organizme : EC50 Alge Scenedesmus subspicatus > 50.00 mg/L 72h b) Hronična toksičnost na vodene organizme : NOEC Dafinija = 3.00000 mg/L 504h c) Bakterijska toksičnost : EC10 Pseudomonas putida = 1120.00 mg/L 18h
1,3-Benzenedimethanamine, reaction products with glycidyl tolyl ether	CAS: 90194-04-0 - EINECS: 290-611-0	a) Akutna toksičnost na vodene organizme : LL50 Riba Oncorhynchus mykiss (rainbow trout) = 1.10 mg/L 96h OECD Test Guideline 203 a) Akutna toksičnost na vodene organizme : EL50 Dafinija Daphnia magna (Water flea) = 3.90 mg/L 48h OECD Test Guideline 202 a) Akutna toksičnost na vodene organizme : EL50 Alge Pseudokirchneriella subcapitata (green algae) = 1.10 mg/L 72h OECD Test Guideline 201
Amines, polyethylenepoly-, tetraethylenepentamine fraction	CAS: 90640-66-7 - EINECS: 292-587-7	a) Akutna toksičnost na vodene organizme : LC50 Riba freshwater fish = 420.00000 mg/L a) Akutna toksičnost na vodene organizme : LC50 freshwater invertebrates = 24.10000 mg/L a) Akutna toksičnost na vodene organizme : EC50 Alge freshwater algae = 6.80000 mg/L a) Akutna toksičnost na vodene organizme : EC50 microorganisms = 97.30000 mg/L
Phenol, styrenated	CAS: 61788-44-1 - EINECS: 262-975-0	a) Akutna toksičnost na vodene organizme : NOEC Alge = 0.50000 mg/L a) Akutna toksičnost na vodene organizme : LC50 Riba Danio rerio = 24.00000 mg/L 96h „OECD Guideline 203 (Fish, Acute Toxicity Test) b) Hronična toksičnost na vodene organizme : NOEC Riba 3.80000 mg/L - 14days a) Akutna toksičnost na vodene organizme : EC50 Dafinija Daphnia magna = 4.60000 mg/L 48h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) b) Hronična toksičnost na vodene organizme : NOEC Dafinija Daphnia magna = 1.50000 mg/L - 21days a) Akutna toksičnost na vodene organizme : EL50 Alge Chlorella vulgaris = 3.14000 72h „OECD Guideline 201 (Alga, Growth Inhibition Test) a) Akutna toksičnost na vodene organizme : EC50 Sludge activated sludge = 360.00000 mg/L 3h ISO 8192 (Water quality - Test for inhibition of oxygen consumption by activated sludge for carbonaceous and ammonium oxidation)
Amines, polyethylenepoly-, triethylenetetramine fraction	CAS: 90640-67-8 - EINECS: 292-588-2 - INDEX: 612-059-00-5	a) Akutna toksičnost na vodene organizme : LC50 Riba Pimephales promelas = 330.00000 mg/L 96h „U.S EPA- TSCA, 40 CFR Part 797 1400 a) Akutna toksičnost na vodene organizme : EC50 Dafinija Daphnia magna = 31.10000 mg/L 48h EU Method C.2 (Acute Toxicity for Daphnia) a) Akutna toksičnost na vodene organizme : EC50 Alge Pseudokirchneriella subcapitata = 20.00000 mg/L 72h OECD 201 d) Zemaljska toksičnost : NOEC Crv Eisenia fetida = 62.50000 mg/kg OECD Guideline 222 (Earthworm Reproduction Test (Eisenia fetida/Eisenia andrei)) - 56days a) Akutna toksičnost na vodene organizme : NOEC Alge soil microorganisms = 72.00000 mg/L
Benzylidimethylamine	CAS: 103-83-3 - EINECS: 203-149-1 - INDEX:	a) Akutna toksičnost na vodene organizme : LC50 Riba Pimephales promelas = 37.80000 mg/L 96h

a) Akutna toksičnost na vodene organizme : EC50 Dafinija Daphnia magna > 100.00000 mg/L 48h EU method C.2 'Acute Toxicity for Daphnia' (2008)

a) Akutna toksičnost na vodene organizme : EC50 Alge Desmodesmus subspicatus = 1.34000 mg/L 72h EU method C.3 'Alga Inhibition Test' (2009)

Salicylic acid

CAS: 69-72-7 -
EINECS: 200-712-3

a) Akutna toksičnost na vodene organizme : LC50 Riba Pimephales promelas = 1380.00000 mg/L 96h

a) Akutna toksičnost na vodene organizme : LC50 Dafinija freshwater invertebrates = 870.00000 mg/L 48h „Kamaya et al., 2005

b) Hronična toksičnost na vodene organizme : NOEC Dafinija = 10.00000 mg/L OECD guideline 202 - 21days

a) Akutna toksičnost na vodene organizme : EC50 Alge Scenedesmus subspicatus > 100.00000 mg/L 72h OECD guideline 201

c) Bakterijska toksičnost : EC50 Pseudomonas putida = 380.00000 mg/L

12.2. Postojanost i razgradivost

Sastojak	Postojanost/razgradivost:	Test	Trajanje	Vrednost	Beleške:
Benzyl alcohol	Brzo-biološki razgradiv	Rastvoreni organski ugljenik		96.000	%; OECD Guideline 301A
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)	Nije brzo-biološki razgradiv	Potrošnja kiseonika		0.000	EU Method C.4-D (Determination of the "Ready" Biodegradability - Manometric Respirometry Test)
2,4,6-tris(dimethylaminomethyl)phenol	Nije brzo-biološki razgradiv				
Fatty acids, c18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Nije brzo-biološki razgradiv				OECD 301 D
Reaction product of fatty acids, C18 alkyl with amines, polyethylenepoly-tetraethylenepentamine fraction	Nije brzo-biološki razgradiv				
3-aminomethyl-3,5,5-trimethylcyclohexylamine	Nije brzo-biološki razgradiv	Rastvoreni organski ugljenik		8.000	%; EU-method C.4-A
1,3-Benzenedimethanamine, reaction products with glycidyl tolyl ether	Nije brzo-biološki razgradiv	Rastvoreni organski ugljenik	28d	8.000	Test Type: aerobic Inoculum: activated sludge Concentration: 6,9 mg/l Result: Not readily biodegradable. Biodegradation: 8 % Related to: Dissolved organic carbon (DOC) Exposure time: 28 d Method: Directive 67/548/EEC Annex V, C.4.A. Test substance: Fresh water GLP: yes
Amines, polyethylenepoly-, tetraethylenepentamine fraction	Nije brzo-biološki razgradiv				
Phenol, styrenated	Nije brzo-biološki razgradiv				
Amines, polyethylenepoly-, triethylenetetramine fraction	Nije brzo-biološki razgradiv				OECD 301D
Benzyl dimethylamine	Nije brzo-biološki razgradiv				

12.3. Bioakumulacija

Sastojak	Bioakumulativnost	Test	Vredno st	Beleške:
Benzyl alcohol	Bioakumulativan	BCF - Biokoncentracioni faktor	1.000	L/kg ww
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)	Bioakumulativan	BCF - Biokoncentracioni faktor	4.770	L/kg ww
Fatty acids, c18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Bioakumulativan	BCF - Biokoncentracioni faktor	77.400	L/kg ww; QSAR
Reaction product of fatty acids, C18 alkyl with amines, polyethylenepoly-tetraethylenepentamine fraction	Bioakumulativan	BCF - Biokoncentracioni faktor	138.000	L/kg ww
Phenol, styrenated	Bioakumulativan	BCF - Biokoncentracioni faktor	14.430	L/kg ww
Benzyl dimethylamine	Nije bioakumulativan			

12.4. Pokretljivost u zemlji

Sastojak	Pokretljivost u tlu
3-aminomethyl-3,5,5-trimethylcyclohexylamine	Nije mobilan

12.5. Rezultati ocenjivanja svojstava PBT i vPvB

Nema PBT Sastojci su prisutni

12.6. Endokrino disruptivna svojstva

Bez endokrino disruptivnih supstanci prisutnih u koncentraciji >= 0.1%

12.7. Ostala neželjena dejstva

N.A.

POGLAVLJE 13: Zbrinjavanje

13.1. Metode obrade otpada

Regenerisati ako je moguće. Poslati ovlašćenim postrojenjima za odlaganje ili na spaljivanje pod kontrolisanim uslovima. Pri tome se pridržavati važećih lokalnih i državnih regulativa.

Шифра отпада према европском каталогу отпада (ЕВЦ) не може се одредити због зависности од употребе. Обратите се овлашћеном сервису за одлагање отпада.

Svojstva otpada koja ga čine opasnim Aneks III, Direktiva 2008/98 / EZ):

N.A.

POGLAVLJE 14: Podaci o prevozu

14.1 UN broj ili identifikacioni broj

2735

14.2. Ispravno ime isporuke UN

ADR-Naziv za isporuku: AMINI, NAGRIZAJUĆI, TEČNI, N.D.N. (4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine) - 2,4,6-tris(dimethylaminomethyl)phenol)

IATA-Tehnički naziv: AMINI, NAGRIZAJUĆI, TEČNI, N.D.N. (4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine) - 2,4,6-tris(dimethylaminomethyl)phenol)

IMDG-Tehnički naziv: AMINI, NAGRIZAJUĆI, TEČNI, N.D.N. (4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine) - 2,4,6-tris(dimethylaminomethyl)phenol)

14.3. Prevozni razred(i) opasnosti

ADR-Razred: 8

IATA-Razred: 8

IMDG-Razred: 8

14.4. Grupa pakovanja

ADR-Grupa pakovanja: II

IATA-Grupa pakovanja: II

IMDG-Grupa pakovanja: II

14.5. Opasnosti za životnu sredinu

Morski zagadjivač: Ne

Zagađivač životne sredine: Ne

IMDG-EMS: F-A, S-B

14.6. Posebne mere opreza za korisnika

Transport kopnenim putem - put i željeznica (ADR-RID):

ADR-Označavanje: 8

ADR - Identifikacijski broj opasnosti: 80

ADR-posebne odredbe: 274

ADR ograničenja prevoza u tunelu: 2 (E)

ADR Limited Quantities: 1 L

ADR Excepted Quantities: E2

Vazdušni transport (IATA):

IATA-Putnički avion: 851

IATA-Teretni avion: 855

IATA-Označavanje: 8

IATA-Opasnosti nižeg reda: -

IATA-Erg: 8L

IATA-Specijalne napomene: A3 A803

Transport pomorskim putem (IMDG):

IMDG-Kod skladišnog prostora: Category A

IMDG-Napomene o skladišnom prostoru: SG35 SGG18

IMDG-Opasnosti nižeg reda: -

IMDG-Specijalne napomene: 274

14.7. Pomorski transport u rasutom stanju prema IMO instrumentima

N.A.

POGLAVLJE 15: Podaci o propisima

15.1. Propisi u oblasti sigurnosti, zdravlja i životne sredine/posebni propisi za materiju ili smešu

Direktiva 98/24/EC (Rizici koji nastaju od hemijskih agenasa na radu)

Direktiva 2000/39/EC (Granična vrednost profesionalne izloženosti)

Uredba (EC) br. 1907/2006 (REACH)

Uredba (EC) br. 1272/2008 (CLP)

Uredba (EC) br. 790/2009 (ATP 1 CLP) i (EZ) br. 758/2013

Uredba (EZ) br. 286/2011 (ATP 2 CLP)

Uredba (EZ) br. 618/2012 (ATP 3 CLP)

Uredba (EZ) br. 487/2013 (ATP 4 CLP)

Uredba (EZ) br. 944/2013 (ATP 5 CLP)

Uredba (EZ) br. 605/2014 (ATP 6 CLP)

Uredba (EZ) br. 2015/1221 (ATP 7 CLP)

Uredba (EZ) br. 2016/918 (ATP 8 CLP)

Uredba (EZ) br. 2016/1179 (ATP 9 CLP)

Uredba (EZ) br. 2017/776 (ATP 10 CLP)

Uredba (EZ) br. 2018/669 (ATP 11 CLP)

Uredba (EZ) br. 2018/1480 (ATP 13 CLP)

Uredba (EZ) br. 2019/521 (ATP 12 CLP)

Uredba (EZ) br. 2020/217 (ATP 14 CLP)

Uredba (EZ) br. 2020/1182 (ATP 15 CLP)

Uredba (EZ) br. 2021/643 (ATP 16 CLP)

Uredba (EZ) br. 2020/878

Normativ 648/2004/EC.

Ograničenja u vezi s proizvodom ili sastojcima u skladu s Prilogom XVII Uredbe (EZ-a) 1907/2006 (REACH) i naknadne izmene:

Ograničenja koja se odnose na proizvod: 3

Ograničenja koja se odnose na sadržane supstance: 75

Napomene koje se odnose na Direktivu EZ 2012/18 (Seveso III):

N.A.

Uredba (EU) br. 649/2012 (PIC uredba)

Nema navedenih supstanci

Nemačka klasa opasnosti po vodu

Klasa 1: blago opasno za vodu.

SVHC substance:

Нема расположивих података

15.2. Procena hemijske sigurnosti

Izvršena je procena hemijske sigurnosti za mix

POGLAVLJE 16: Ostale informacije

Šifra	Opis	
EUH071	Korozivno za disajne puteve.	
H226	Zapaljiva tečnost i para.	
H302	Štetno ako se proguta.	
H312	Štetno u dodiru s kožom.	
H314	Izaziva teške opekotine na koži i teške povrede očiju.	
H315	Izaziva iritaciju kože.	
H317	Može izazvati alergijsku reakciju na koži.	
H318	Izaziva teške povrede očiju.	
H319	Izaziva tešku iritaciju očiju.	
H331	Otrovno ako se udahne.	
H332	Štetno ako se udahne.	
H351	Sumnja se da izaziva rak ako se udahne.	
H361d	Postoji sumnja da može oštetiti plod.	
H400	Veoma otrovno za vodene organizme.	
H410	Veoma otrovno za vodene organizme na koje ostavlja dugotrajne posledice.	
H411	Otrovno za vodene organizme na koje ostavlja dugotrajne posledice.	
H412	Štetno za vodene organizme na koje ostavlja dugotrajne posledice.	
Šifra	Klasa i kategorija opasnosti	Opis
2.6/3	Flam. Liq. 3	Zapaljiva tečnost, Kategorija 3
3.1/3/Inhal	Acute Tox. 3	Akutna toksičnost (inhalaciona), Kategorija 3
3.1/4/Dermal	Acute Tox. 4	Akutna toksičnost (dermalna), Kategorija 4
3.1/4/Inhal	Acute Tox. 4	Akutna toksičnost (inhalaciona), Kategorija 4
3.1/4/Oral	Acute Tox. 4	Akutna toksičnost (oralna), Kategorija 4
3.2/1B	Skin Corr. 1B	Korozivno oštećenje kože, Kategorija 1B
3.2/1C	Skin Corr. 1C	Korozivno oštećenje kože, Kategorija 1C
3.2/2	Skin Irrit. 2	Iritacija kože, Kategorija 2
3.3/1	Eye Dam. 1	Teško oštećenje oka, Kategorija 1
3.3/2	Eye Irrit. 2	Iritacija oka, Kategorija 2
3.4.2/1	Skin Sens. 1	Senzibilizacija kože, Kategorija 1
3.4.2/1-1A-1B	Skin Sens. 1,1A,1B	Senzibilizacija kože, Kategorija 1, 1A, 1B
3.4.2/1A	Skin Sens. 1A	Senzibilizacija kože, Kategorija 1A
3.6/2	Carc. 2	Karcinogenost, Kategorija 2
3.7/2	Repr. 2	Reproduktivna toksičnost, Kategorija 2
4.1/A1	Aquatic Acute 1	Akutna opasnost po vodenu životnu sredinu, kategorija 1
4.1/C1	Aquatic Chronic 1	Hronična (dugotrajna) opasnost po vodenu životnu sredinu, kategorija 1
4.1/C2	Aquatic Chronic 2	Hronična (dugotrajna) opasnost po vodenu životnu sredinu, kategorija 2
4.1/C3	Aquatic Chronic 3	Hronična (dugotrajna) opasnost po vodenu životnu sredinu, kategorija 3

Klasifikacija i procedure korišćene za izvođenje klasifikacije smeša na osnovu Uredbe (EZ) 1272/2008 [CLP]:

Klasifikacija u skladu sa Uredbom (EZ) Procedura klasifikacije br. 1272/2008

3.2/1B	Metod izračunavanja
3.3/1	Metod izračunavanja
3.4.2/1A	Metod izračunavanja
4.1/C3	Metod izračunavanja

Ovaj dokument izradila je tehnički kompetentna osoba za SDS, koja je prikladno za to osposobljena.

Glavni bibliografski izvori:

ECDIN - Mreža podataka i informacija o hemijskim sredstvima za životnu sredinu - Zajednički istraživački centar, Komisija Evropskih zajednica

SAX's OPASNE OSOBINE INDUSTRIJSKIH MATERIJA- Osmo izdanje - Van Nostrand Reinold

Ovde objavljuje informacije se temelje na našem znanju u vreme gore navedenog datuma. Odnose se samo na navedene proizvode i ne predstavlja garanciju nekog određenog kvaliteta.

Obaveza je korisnika da utvrdi da je ova informacija celovita i da odgovara specifičnoj upotrebi.

Ovaj MSDS poništava i zamjenjuje sva predhodna izdanja.

Legenda skraćenica i akronima, korišćenih u bezbednosnom listu.

ACGIH: Američka konferencija vladinih industrijskih higijeničara (ACGIH)

ADR: Evropski sporazum o međunarodnoj razmeni opasnih dobara drumom.

AND: Evropskog sporazuma koje se odnose na međunarodni prevoz opasnih materija po vodene tokove u kopno

ATE: Procena akutne toksičnosti

ATEmix: Procenjena vrednost akutne toksičnosti (Mešavine)

BCF: Faktor biološke koncentracije

BEI: Indeks biološke izloženosti

BOD: Potražnja za biohemijskim kiseonikom

CAS: CAS registarski broj (Američko hemijsko društvo).

CAV: Centar za otrove

CE: Evropska zajednica

CLP: Klasifikacija, označavanje, pakovanje.

CMR: Kancerogeni, mutageni i reprotoksični

COD: Potražnja za hemijskim kiseonikom

COV: Nestabilno organsko jedinjenje

CSA: Procena hemijske bezbednosti

CSR: Izveštaj o hemijskoj bezbednosti

DMEL: Izvedeni minimalni nivo efekta

DNEL: Izvedeni nivo bez uticaja.

DPD: Direktiva o opasnim preparatima

DSD: Direktiva o opasnim supstancama

EC50: Polovina maksimalno efektivne koncentracije

ECHA: Evropska agencija za hemikalije

EINECS: Evropski sadržaj postojećih komercijalnih hemijskih supstanci.

ES: Scenario izloženosti

GefStoffVO: Propis o opasnim supstancama, Nemačka.

GHS: Globalno usklađen sistem klasifikacije i označavanja hemikalija.

IARC: Međunarodna agencija za istraživanje kancera

IATA: Međunarodno udruženje vazdušnog prevoza.

IATA-DGR: Propis o opasnostima dobara prema međunarodnom udruženju za vazdušni prevoz (IATA).

IC50: Polovina maksimalno inhibitorne koncentracije

ICAO: Organizacija međunarodnog civilnog vazduhoplovstva.

ICAO-TI: Tehnička uputstva prema organizaciji međunarodnog civilnog vazduhoplovstva (ICAO).

IMDG: Međunarodni pomorski kodeks opasnih dobara.

INCI: Međunarodna nomenklatura kozmetičkih sastojaka.

IRCCS: Naučni institut za istraživanje, hospitalizaciju i zdravstvenu zaštitu

KAFH: Keep Away From Heat

KSt: Koeficijent eksplozije.

LC50: Koncentracija smrtnosti u 50% ispitane populacije.

LD50: Doza smrtnosti u 50% ispitane populacije.

LDLo: Mala smrtonosna doza

N.A.: Nije primenjivo

N/A: Nije primenjivo

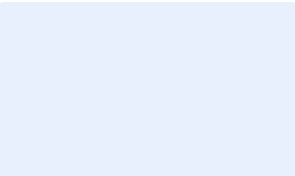
N/D: Nije definisano / Nije dostupno

NA: Nije dostupan

NIOSH: Narodni institut za bezbednost na radu i zdravlje
NOAEL: Nema posmatranog nivoa neželjenih efekata
OSHA: Zaštita na radu i nega zdravlja
PBT: Postojan, bioakumulativan i toksičan
PGK: Uputstvo za pakovanje
PNEC: Predviđena neuticajna koncentracija.
PSG: Putnici
RID: Propis o međunarodnom prevozu opasnih dobara prugom.
STEL: Granica kratkotrajne izloženosti.
STOT: Toksičnost za ciljani organ.
TLV: Granična vrednost praga.
TWATLV: Granična vrednost praga za vremenski određen prosek. (ACGIH standard)
vPvB: Veoma postojan, vrlo bioakumulativan.
WGK: Nemačka klasifikacija opasnosti za vodu.

Odlomci promenjeni u odnosu na prethodnu reviziju:

- 1. IDENTIFIKACIJA SUPSTANCE/PREPARATA I FIRME/PREDUZEĆA
- 3. SASTAV/INFORMACIJE O SASTOJCIMA
- 8. KONTROLA IZLAGANJA / LIČNA ZAŠTITA
- 11. TOKSIKOLOŠKI PODACI
- 12. EKOLOŠKE INFORMACIJE
- 13. ODLAGANJE
- 14. INFORMACIJE ZA TRANSPORT
- 16. OSTALE INFORMACIJE



Exposure Scenario

Benzyl alcohol

Exposure Scenario, 30/06/2021

Substance identity	
	Benzyl alcohol
CAS No.	100-51-6
INDEX No.	603-057-00-5
EINECS No.	202-859-9
Registration number	01-2119492630-38

Table of contents

1. **ES 1** Widespread use by professional workers; Various products (PC9b, PC9a, PC1, PC15); Building and construction work (SU19)

1. ES 1		Widespread use by professional workers; Various products (PC9b, PC9a, PC1, PC15); Building and construction work (SU19)	
1.1 TITLE SECTION			
Exposure Scenario name	Professional application of coatings and inks - Use in rigid foams, coatings, adhesives and sealants		
Date - Version	30/06/2021 - 1.0		
Life Cycle Stage	Widespread use by professional workers		
Main user group	Professional uses		
Sector(s) of use	Professional uses (SU22) - Building and construction work (SU19)		
Product Categories	Fillers, putties, plasters, modelling clay (PC9b) - Coatings and paints, thinners, paint removers (PC9a) - Adhesives, sealants (PC1) - Non-metal surface treatment products (PC15)		
Environment Contributing Scenario			
CS1	ERC8a - ERC8d		
Worker Contributing Scenario			
CS2	PROC8a - PROC10		
1.2 Conditions of use affecting exposure			
1.2. CS1: Environment Contributing Scenario (ERC8a, ERC8d)			
Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8a, ERC8d)		
<i>Product (article) characteristics</i>			
Physical form of product: Liquid, vapour pressure < 10 Pa (Standard Temperature and Pressure)			
Vapour pressure: = 7 Pa			
<i>Amount used, frequency and duration of use (or from service life)</i>			
Amounts used: Annual site tonnage = 1000 t(tonnes)/year			
Release type: Continuous release			
Emission days: 365 days per year			
<i>Conditions and measures related to sewage treatment plant</i>			
STP type: Municipal Sewage Treatment Plant Water - minimum efficiency of: = 87.36 %			
STP effluent (m³/day): 2000			
<i>Conditions and measures related to treatment of waste (including article waste)</i>			
Waste treatment Product residual disposal complies with applicable regulations.			
1.2. CS2: Worker Contributing Scenario (PROC8a, PROC10)			
Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Roller application or brushing (PROC8a, PROC10)		
<i>Product (article) characteristics</i>			
Physical form of product: Liquid			

Vapour pressure:

< 7 Pa

Amount used, frequency and duration of use/exposure**Duration:**

Covers use up to = 8 h/day

Technical and organisational conditions and measures**Technical and organisational measures**

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.
Provide a basic standard of general ventilation (1 to 3 air changes per hour).

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

Wear suitable gloves tested to EN374.	Dermal - minimum efficiency of: = 90 %
---------------------------------------	--

Other conditions affecting worker exposure

Covers indoor and outdoor use

Professional use

Temperature: Assumes use at not more than 20 °C above ambient temperature.**Body parts exposed:**

Assumes that potential dermal contact is limited to hands.

1.3 Exposure estimation and reference to its source**1.3. CS1: Environment Contributing Scenario (ERC8a, ERC8d)**

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater	N/A	EUSES v2.1	< 0.01
freshwater sediment	N/A	EUSES v2.1	< 0.01
marine water	N/A	EUSES v2.1	< 0.01
marine sediment	N/A	EUSES v2.1	< 0.01
soil	N/A	EUSES v2.1	= 0.019
Man via environment - Inhalation	N/A	EUSES v2.1	< 0.01
Man via environment - Oral	N/A	EUSES v2.1	< 0.01

1.3. CS2: Worker Contributing Scenario (PROC8a, PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
combined routes, systemic, long-term	N/A	ECETOC TRA worker v3	0.977

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES**Guidance to check compliance with the exposure scenario:**

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

Exposure Scenario

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Exposure Scenario, 01/06/2022

Substance identity	
	3-aminomethyl-3,5,5-trimethylcyclohexylamine
CAS No.	2855-13-2
INDEX No.	612-067-00-9
EINECS No.	220-666-8
Registration number	01-2119514687-32

Table of contents

1. **ES 1** Widespread use by professional workers; Various products (PC9b, PC9a, PC1, PC32)

1. ES 1		Widespread use by professional workers; Various products (PC9b, PC9a, PC1, PC32)	
1.1 TITLE SECTION			
Exposure Scenario name	Use in rigid foams, coatings, adhesives and sealants		
Date - Version	01/06/2022 - 1.0		
Life Cycle Stage	Widespread use by professional workers		
Main user group	Professional uses		
Sector(s) of use	Professional uses (SU22)		
Product Categories	Fillers, putties, plasters, modelling clay (PC9b) - Coatings and paints, thinners, paint removers (PC9a) - Adhesives, sealants (PC1) - Polymer preparations and compounds (PC32)		
Environment Contributing Scenario			
CS1	ERC8c		
CS2	ERC8f		
Worker Contributing Scenario			
CS3 Material transfers	PROC8a		
CS4 Rolling, Brushing	PROC10		
CS5 Material transfers	PROC8a		
CS6 Rolling, Brushing	PROC10		
1.2 Conditions of use affecting exposure			
1.2. CS1: Environment Contributing Scenario (ERC8c)			
Environmental release categories	Widespread use leading to inclusion into/onto article (indoor) (ERC8c)		
<i>Product (article) characteristics</i>			
Physical form of product: Liquid			
Concentration of substance in product: Covers percentage substance in the product up to 100 %.			
<i>Technical and organisational conditions and measures</i>			
Control measures to prevent releases			
		Water - minimum efficiency of: 0.015 %	
1.2. CS2: Environment Contributing Scenario (ERC8f)			
Environmental release categories	Widespread use leading to inclusion into/onto article (outdoor) (ERC8f)		
<i>Product (article) characteristics</i>			
Physical form of product: Liquid			
Concentration of substance in product: Covers percentage substance in the product up to 100 %.			
<i>Technical and organisational conditions and measures</i>			
Control measures to prevent releases			

	Water - minimum efficiency of: 0.015 %
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1.2. CS3: Worker Contributing Scenario: Material transfers (PROC8a)

Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)
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Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers use up to 4 h/day

Frequency:

Covers use up to <= 240 days per year

Technical and organisational conditions and measures

Technical and organisational measures

Local exhaust ventilation	Inhalation - minimum efficiency of: 80 %
---------------------------	--

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

Personal protection

Wear suitable respiratory protection.	Inhalation - minimum efficiency of: 95 %
Wear suitable gloves tested to EN374.	Dermal - minimum efficiency of: 98 %
Wear suitable coveralls to prevent exposure to the skin.	
Use suitable eye protection.	

Other conditions affecting worker exposure

Indoor use

Professional use

Body parts exposed:

Assumes that potential dermal contact is limited to hands.

1.2. CS4: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Process Categories	Roller application or brushing (PROC10)
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Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers use up to 4 h/day

Frequency:

Covers use up to <= 240 days per year

Technical and organisational conditions and measures

Technical and organisational measures

Local exhaust ventilation	Inhalation - minimum efficiency of: 80 %
---------------------------	--

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

Personal protection

Wear suitable respiratory protection.	Inhalation - minimum efficiency of: 95 %
Wear suitable gloves tested to EN374.	Dermal - minimum efficiency of: 98 %
Wear suitable coveralls to prevent exposure to the skin.	
Use suitable eye protection.	

Other conditions affecting worker exposure

Indoor use

Professional use

Body parts exposed:

Assumes that potential dermal contact is limited to hands.

1.2. CS5: Worker Contributing Scenario: Material transfers (PROC8a)

Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)
--------------------	--

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers use up to 1 h

Frequency:

Covers use up to <= 240 days per year

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

Personal protection

Wear suitable respiratory protection.	Inhalation - minimum efficiency of: 98 %
Wear suitable gloves tested to EN374.	Dermal - minimum efficiency of: 98 %
Wear suitable coveralls to prevent exposure to the skin.	
Use suitable eye protection.	

Other conditions affecting worker exposure

Outdoor use

Professional use

Body parts exposed:

Assumes that potential dermal contact is limited to hands.

1.2. CS6: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Process Categories Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers use up to 1 h

Frequency:

Covers use up to <= 240 days per year

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

Personal protection

Wear suitable respiratory protection.	Inhalation - minimum efficiency of: 98 %
Wear suitable gloves tested to EN374.	Dermal - minimum efficiency of: 98 %
Wear suitable coveralls to prevent exposure to the skin.	
Use suitable eye protection.	

Other conditions affecting worker exposure

Outdoor use

Professional use

Body parts exposed:

Assumes that potential dermal contact is limited to hands.

1.3 Exposure estimation and reference to its source

1.3. CS1: Environment Contributing Scenario (ERC8c)

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater	0.0004855 mg/L	N/A	< 0.01
freshwater sediment	0.047 mg/kg dry weight	N/A	< 0.01
marine water	4.85E-05 mg/L	N/A	< 0.01
marine sediment	0.005 mg/kg dry weight	N/A	< 0.01
marine water	4.85E-05 mg/L	N/A	< 0.01
Sewage treatment plant	1.48E-05 mg/L	N/A	< 0.01
Agricultural soil	0.017 mg/kg dry weight	N/A	< 0.01
Man via environment - Oral	0.000188 mg/kg bw/day	N/A	< 0.01

1.3. CS2: Environment Contributing Scenario (ERC8f)

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater	0.000487 mg/L	N/A	< 0.01
freshwater sediment	0.047 mg/kg dry weight	N/A	< 0.01
marine water	4.815E-05 mg/L	N/A	< 0.01
marine sediment	0.005 mg/kg dry weight	N/A	< 0.01
Sewage treatment plant	2.96E-05 mg/L	N/A	< 0.01
Agricultural soil	0.017 mg/kg dry weight	N/A	= 0.015
Man via environment - Oral	0.0001193 mg/kg bw/day	N/A	< 0.01

1.3. CS3: Worker Contributing Scenario: Material transfers (PROC8a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal	13.714 mg/kg bw/day	N/A	0.274
inhalative	106.438 mg/m ³	N/A	N/A

1.3. CS4: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal	27.429 mg/kg bw/day	N/A	0.549
inhalative	106.438 mg/m ³	N/A	N/A

1.3. CS5: Worker Contributing Scenario: Material transfers (PROC8a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal	13.714 mg/kg bw/day	N/A	0.274
inhalative	24.835 mg/m ³	N/A	0.497

1.3. CS6: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal	27.429 mg/kg bw/day	N/A	0.549
inhalative	24.835 mg/m ³	N/A	0.497

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

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

Exposure Scenario

2,4,6-tris(dimethylaminomethyl)phenol

Exposure Scenario, 05/11/2021

Substance identity	
	2,4,6-tris(dimethylaminomethyl)phenol
CAS No.	90-72-2
INDEX No.	603-069-00-0
EINECS No.	202-013-9
Registration number	01-2119560597-27

Table of contents

1. **ES 1** Widespread use by professional workers; Fillers, putties, plasters, modelling clay (PC9b)

1. ES 1		Widespread use by professional workers; Fillers, putties, plasters, modelling clay (PC9b)	
1.1 TITLE SECTION			
Exposure Scenario name	Road and construction applications - Use in rigid foams, coatings, adhesives and sealants		
Date - Version	05/11/2021 - 1.0		
Life Cycle Stage	Widespread use by professional workers		
Main user group	Professional uses		
Sector(s) of use	Professional uses (SU22)		
Product Categories	Fillers, putties, plasters, modelling clay (PC9b)		
Environment Contributing Scenario			
CS1		ERC8b - ERC8e	
Worker Contributing Scenario			
CS2 Material transfers		PROC8a	
CS3 Rolling, Brushing		PROC10	
CS4 Rolling, Brushing		PROC10	
CS5 Roller, spreader, flow application		PROC11	
CS6 Roller, spreader, flow application		PROC11	
1.2 Conditions of use affecting exposure			
1.2. CS1: Environment Contributing Scenario (ERC8b, ERC8e)			
Environmental release categories	Widespread use of reactive processing aid (no inclusion into or onto article, indoor) - Widespread use of reactive processing aid (no inclusion into or onto article, outdoor) (ERC8b, ERC8e)		
Product (article) characteristics			
Physical form of product: Liquid			
Vapour pressure: 0.197 Pa			
Concentration of substance in product: Covers percentage substance in the product up to 100 %.			
Amount used, frequency and duration of use (or from service life)			
Amounts used: Amount per use <= 0.0014 tonnes/day			
Release type: Continuous release			
Conditions and measures related to sewage treatment plant			
STP type: No specific measures identified. Water - minimum efficiency of: = 0.059 %			
Conditions and measures related to treatment of waste (including article waste)			
Waste treatment This material and its container must be disposed of as hazardous.			
1.2. CS2: Worker Contributing Scenario: Material transfers (PROC8a)			
Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities		

(PROC8a)	
Product (article) characteristics	
Physical form of product: Liquid	
Vapour pressure: = 0.197 Pa	
Concentration of substance in product: Covers percentage substance in the product up to 100 %.	
Amount used, frequency and duration of use/exposure	
Duration: Duration of contact < 30 min	
Technical and organisational conditions and measures	
Technical and organisational measures	
Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).	Inhalation - minimum efficiency of: 30 %
Local exhaust ventilation	Inhalation - minimum efficiency of: 80 %
Conditions and measures related to personal protection, hygiene and health evaluation	
Personal protection	
Wear chemically resistant gloves (tested to EN374) in combination with "basic" employee training. Wear a full face respirator conforming to EN136.	Dermal - minimum efficiency of: 90 % Inhalation - minimum efficiency of: 95 %
Use suitable eye protection.	
Other conditions affecting worker exposure	
Body parts exposed: Assumes that potential dermal contact is limited to hands.	
1.2. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)	
Process Categories	Roller application or brushing (PROC10)
Product (article) characteristics	
Physical form of product: Liquid	
Vapour pressure: = 0.197 Pa	
Concentration of substance in product: Covers percentage substance in the product up to 100 %.	
Amount used, frequency and duration of use/exposure	
Duration: Duration of contact < 440 min	
Technical and organisational conditions and measures	
Technical and organisational measures	
Provide a basic standard of general ventilation (1 to 3 air changes per hour).	Inhalation - minimum efficiency of: 44 %

Ensure that direction of application is only horizontal or downward.
Open doors and windows.

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

Personal protection

Wear chemically resistant gloves (tested to EN374) in combination with "basic" employee training. Wear a full face respirator conforming to EN136. Wear suitable respiratory protection. Wear an impervious suit.	Dermal - minimum efficiency of: 90 % Inhalation - minimum efficiency of: 99 %
Use suitable eye protection.	

Other conditions affecting worker exposure

Indoor use

Professional use

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

Body parts exposed:

Assumes that potential dermal contact is limited to hands.

1.2. CS4: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Process Categories	Roller application or brushing (PROC10)
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Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

= 0.197 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Duration of contact < 440 min

Technical and organisational conditions and measures

Technical and organisational measures

Mechanical ventilation giving at least [ACH]:	Inhalation - minimum efficiency of: 44 %
Ensure that direction of application is only horizontal or downward.	
Open doors and windows.	

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

Personal protection

Wear chemically resistant gloves (tested to EN374) in combination with "basic" employee training. Wear a full face respirator conforming to EN136. Wear suitable respiratory protection. Wear an impervious suit.	Dermal - minimum efficiency of: 90 % Inhalation - minimum efficiency of: 99 %
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Use suitable eye protection.

Other conditions affecting worker exposure

Outdoor use

Professional use

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

Body parts exposed:

Assumes that potential dermal contact is limited to hands.

1.2. CS5: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Process Categories	Non industrial spraying (PROC11)
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Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

= 0.197 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Duration of contact < 4 h

Technical and organisational conditions and measures

Technical and organisational measures

Provide a basic standard of general ventilation (1 to 3 air changes per hour).	Inhalation - minimum efficiency of: 44 %
Ensure that direction of application is only horizontal or downward.	
Open doors and windows.	

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

Personal protection

Wear chemically resistant gloves (tested to EN374) in combination with "basic" employee training.	Dermal - minimum efficiency of: 90 % Inhalation - minimum efficiency of: 99 %
Wear a full face respirator conforming to EN136.	
Wear suitable respiratory protection.	
Wear an impervious suit.	
Use suitable eye protection.	

Other conditions affecting worker exposure

Indoor use

Professional use

Body parts exposed:

Assumes that potential dermal contact is limited to hands.

1.2. CS6: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Process Categories	Non industrial spraying (PROC11)
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Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

= 0.197 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Duration of contact < 4 h

Technical and organisational conditions and measures

Technical and organisational measures

Mechanical ventilation giving at least [ACH]:	Inhalation - minimum efficiency of: 44 %
Ensure that direction of application is only horizontal or downward.	
Open doors and windows.	

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

Personal protection

Wear chemically resistant gloves (tested to EN374) in combination with "basic" employee training. Wear a full face respirator conforming to EN136. Wear suitable respiratory protection. Wear an impervious suit.	Dermal - minimum efficiency of: 90 % Inhalation - minimum efficiency of: 99 %
Use suitable eye protection.	

Other conditions affecting worker exposure

Outdoor use

Professional use

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

Body parts exposed:

Assumes that potential dermal contact is limited to hands.

1.3 Exposure estimation and reference to its source

1.3. CS1: Environment Contributing Scenario (ERC8b, ERC8e)

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater	0.00172 mg/L	EUSES v2.1	0.037
freshwater sediment	0.00701 mg/kg dry weight	EUSES v2.1	0.027
marine water	0.00017 mg/L	EUSES v2.1	0.037
marine sediment	0.0007 mg/kg dry weight	EUSES v2.1	0.027
Sewage treatment plant	0.014 mg/L	EUSES v2.1	0.069
Agricultural soil	8E-05 mg/kg dry weight	EUSES v2.1	< 0.01
Man via environment - Inhalation	< 0.0001 mg/m ³	EUSES v2.1	< 0.01

Man via environment - Oral	< 0.0001 mg/kg bw/day	EUSES v2.1	< 0.01
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1.3. CS2: Worker Contributing Scenario: Material transfers (PROC8a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	0.023 mg/m ³	EASY TRA v3.6	0.004
inhalative, systemic, short-term	0.464 mg/m ³	EASY TRA v3.6	0.211
combined routes, systemic, long-term	N/A	N/A	0.247
dermal, systemic, long-term	0.03 mg/kg bw/day	RISKOFDERM v2.1	0.203

1.3. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	0.31 mg/m ³	ECETOC TRA worker v3	0.584
inhalative, systemic, short-term	0.4641238 mg/m ³	EASY TRA v3.6	0.59
combined routes, systemic, long-term	N/A	N/A	0.854
dermal, systemic, long-term	0.041 mg/kg bw/day	RISKOFDERM v2.1	0.27

1.3. CS4: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	0.039 mg/m ³	ECETOC TRA worker v3	0.073
inhalative, systemic, short-term	0.867 mg/m ³	EASY TRA v3.6	0.413
combined routes, systemic, long-term	N/A	N/A	0.343
dermal, systemic, long-term	0.041 mg/kg bw/day	RISKOFDERM v2.1	0.27

1.3. CS5: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	0.367 mg/m ³	ART v1.5	0.022
inhalative, systemic, short-term	0.023 mg/m ³	ART v1.5	0.011
combined routes, systemic, long-term	N/A	N/A	0.827
dermal, systemic, long-term	0.121 mg/kg bw/day	RISKOFDERM v2.1	0.805

1.3. CS6: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	0.019 mg/m ³	ART v1.5	0.037
inhalative, systemic, short-term	0.039 mg/m ³	ART v1.5	0.019
combined routes, systemic, long-term	N/A	N/A	0.101
dermal, systemic, long-term	0.05 mg/kg bw/day	RISKOFDERM v2.1	0.33

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

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