

Safety Data Sheet

Skladno z Uredbo ES št. 1907/2006 (REACH), Člen 31, Priloga II, kot spremenjeno z Uredbo Komisije (EU) št. 2020/878

FACTORY COLORFLOW EP (A)

Date of first edition: 24. 09. 2021

Safety Data Sheet dated 14/09/2026 version 6

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification:

Trade name: FACTORY COLORFLOW EP (A)

Trade code: 001051001

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use: smola; Samo za poklicne uporabnike

Uses advised against: Uporabe, ki niso priporočene; Izdelek ni namenjen za uporabo posameznikom oziroma neizkušenim delavcem

1.3. Details of the supplier of the safety data sheet

Company: KERAKOLL S.p.A.

Via dell'Artigianato, 9

41049 Sassuolo (MODENA) - ITALY

Tel. +39 0536 816511 Fax. +39 0536816581

safety@kerakoll.com

1.4. Emergency telephone number

112 v primeru zastrupitve v sil/ in case of emergency poisoning

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Skin Irrit. 2	Causes skin irritation.
Eye Irrit. 2	Causes serious eye irritation.
Skin Sens. 1B	May cause an allergic skin reaction.
Repr. 1B	May damage fertility or the unborn child.
Aquatic Chronic 3	Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:
No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Hazard pictograms and Signal Word



Danger

Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H360	May damage fertility or the unborn child.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P202	Do not handle until all safety precautions have been read and understood.
P280	Wear protective gloves/clothing and eye/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

EUH208 Contains bis-[4-(2,3-epoksipropoksi)fenil]propan. May produce an allergic reaction.

EUH208 Contains 1,3 Propanediol 2,2-bis(hydroxymethyl)-polymer with 2-(chloromethyl)oxirane. May produce an allergic reaction.

EUH208 Contains 4-morpholinecarbaldehyde. May produce an allergic reaction.

EUH208 Contains Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-(2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl)oxirane. May produce an allergic reaction.

Contains

oksiran, mono[(C12-14-alkiloksi)metil]
derivati

Reaction products of hexane-1,6-diol with
2-(chloromethyl)oxirane (1:2)

Special provisions according to Annex XVII of REACH and subsequent amendments:

Nobena

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$

Other Hazards: Kristalni silicijev dioksid v respirabilni frakciji, ki je prisoten v izdelku, ne prispeva k razvrščanju glede na nevarnost v skladu z merili, določenimi z Uredbo (ES) 1272/2008 (CLP), zaradi fizičnega stanja samega izdelka (tekočina/pastozno trdna), ko je dan v promet in v katerem upravičeno lahko pričakujemo, da bo uporabljen. (Stališče IMA-Europe, Klasifikacija mešanic v tekoči obliki, ki vsebujejo kristalni silicijev dioksid (Maj 2020)).

Tekoča/pastozno trdna zmes zaradi strjevanja ali izpostavljenosti toploti lahko izgubi vsebnost tekočine (voda in druge tekoče komponente) in preide v trdno stanje; v primeru ravnanja s trdo mešanico je za odstranjevanje (neskladen izdelek) ravnajte se po lokalnih in državnih normah.

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: FACTORY COLORFLOW EP (A)

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
$\geq 10 < 20 \%$	bis-[4-(2,3-epoksipropoksi)fenil]propan	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
			Specific Concentration Limits: C $\geq 5\%$: Eye Irrit. 2 H319 C $\geq 5\%$: Skin Irrit. 2 H315	
$\geq 5 < 10 \%$	Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-(2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl)oxirane	EC:701-263-0	Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 2, H411, M-Chronic:1	01-2119454392-40
$\geq 5 < 10 \%$	oksiran, mono[(C12-14-alkiloksi)metil] derivati	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
$\geq 3 < 5 \%$	1,3 Propanediol 2,2-bis(hydroxymethyl)-polymer with 2-(chloromethyl)oxirane	CAS:30973-88-7 EC:608-564-5	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	
$\geq 3 < 5 \%$	Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)	CAS:933999-84-9 EC:618-939-5	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Irrit. 2, H319; Repr. 1B, H360F; Aquatic Chronic 3, H412	01-2119463471-41

≥3-<5 %	Quarz (SiO ₂)	CAS:14808-60-7 EC:238-878-4	STOT RE 1, H372	
≥0.3-<0.5 %	4-morpholinecarbaldehyde	CAS:4394-85-8 EC:224-518-3	Skin Sens. 1B, H317	01-2119987993-12
<0.01 %	fosforjeva kislina	CAS:7664-38-2 EC:231-633-2 Index:015-011-00-6	Skin Corr. 1B, H314 Specific Concentration Limits: 10% ≤ C < 25%: Eye Irrit. 2 H319 10% ≤ C < 25%: Skin Irrit. 2 H315 C ≥ 25%: Skin Corr. 1B H314	01-2119485924-24
<0.0015 %	metanol	CAS:67-56-1 EC:200-659-6 Index:603-001-00-X	Flam. Liq. 2, H225; STOT SE 1, H370; Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 Specific Concentration Limits: C ≥ 10%: STOT SE 1 H370 3% ≤ C < 10%: STOT SE 2 H371	01-2119433307-44

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

- Immediately take off all contaminated clothing.
- Remove contaminated clothing immediately and dispose off safely.
- After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

- After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.
- Protect uninjured eye.

In case of Ingestion:

- Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

- Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

Eye irritation
Eye damages
Skin Irritation
Erythema

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

- Water.
- Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

- None in particular.

5.2. Special hazards arising from the substance or mixture

- Do not inhale explosion and combustion gases.
- Burning produces heavy smoke.

5.3. Advice for firefighters

- Use suitable breathing apparatus .
- Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:

- Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

For emergency responders:

Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

Quartz (SiO₂)

CAS: 14808-60-7	ACGIH	Long Term: 0.025 mg/m ³ (8h) Notes: R, A2 - Pulm fibrosis, lung cancer
	NATION Belgija AL	Long Term: 0.1 mg/m ³ Notes: C Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	NATION Danska AL	Long Term: 0.3 mg/m ³ Notes: alveolijae, liite 3 Source: BEK nr 2203 af 29/11/2021
		Long Term: 0.1 mg/m ³ Notes: EK Source: BEK nr 2203 af 29/11/2021
	NATION Španija AL	Long Term: 0.3 mg/m ³ Notes: Respirable fraction Source: LEP 2022
	NATION Estonija AL	Long Term: 0.1 mg/m ³ Notes: 1, C Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
	NATION Finska AL	Long Term: 0.05 mg/m ³ Notes: alveolijae, liite 3 Source: HTP-ARVOT 2020

NATION Francija AL	Long Term: 0.1 mg/m ³ Notes: La VLEP s'applique à la fraction alvéolaire. Forme de silice cristalline. Source: INRS outil65, article R. 4412-149 du Code du travail
NATION Madžarska AL	Long Term: 0.1 mg/m ³ Source: 5/2020. (II. 6.) ITM rendelet
NATION Irska AL	Long Term: 0.1 mg/m ³ Notes: Respirable fraction Source: 2021 Code of Practice
NATION Italija AL	Long Term: 0.1 mg/m ³ Notes: Polvere di silice cristallina respirabile (frazione inalabile). Rif:D.Lgs 81/2008 Source: D.lgs. 81/2008, Allegato XLIII
NATION Litva AL	Long Term: 0.1 mg/m ³ Notes: Žiūrėti 1 priedo 3 punktą. Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
NATION Nizozemska AL	Long Term: 0.075 mg/m ³ Notes: (2) Source: Arbeidsomstandighedenregeling - Lijst B1
NATION Norveška AL	Long Term: 0.3 mg/m ³ Notes: K 7 Source: FOR-2021-06-28-2248
	Long Term: 0.05 mg/m ³ Notes: K G 7 21 Source: FOR-2021-06-28-2248
NATION Poljska AL	Long Term: 0.1 mg/m ³ Notes: 6) Source: Dz.U. 2018 poz. 1286
NATION Švedska AL	Long Term: 0.1 mg/m ³ Notes: C, M, 3 Source: AFS 2021:3
SUVA Švicar	Long Term: 0.15 mg/m ³ Notes: TWA mg/m ³ : (a), C1A, SSC, P, Cancpulm Silicose / Lugenkrebs Silikose, HSE NIOSH OSHA Source: suva.ch/valeurs-limites

Calcium Carbonate

CAS: 471-34-1

NATION Francija AL	Long Term: 10 mg/m ³ Source: INRS outil65
NATION Hrvatska AL	Long Term: 10 mg/m ³ Notes: U Source: NN 1/2021
	Long Term: 4 mg/m ³ Notes: R Source: NN 1/2021
NATION Madžarska AL	Long Term: 10 mg/m ³ Notes: inhalable aerosol Source: 5/2020. (II. 6.) ITM
NATION Irska AL	Long Term: 10 mg/m ³ Notes: Inhalable fraction Source: 2021 Code of Practice
	Long Term: 4 mg/m ³ Notes: Respirable fraction Source: 2021 Code of Practice
NATION Latvija AL	Long Term: 6 mg/m ³ Source: KN325P1
NATION Poljska AL	Long Term: 10 mg/m ³ Notes: 4) Source: Dz.U. 2018 poz. 1286
SUVA Švicar	Long Term: 3 mg/m ³ Notes: TWA mg/m ³ : (a), Formel / Formal, NIOSH Source: suva.ch/valeurs-limites

Quarz (SiO₂)

CAS: 14808-60-7	ACGIH	Long Term: 0.025 mg/m ³ (8h) Notes: R, A2 - Pulm fibrosis, lung cancer
	EU	Long Term: 0.1 mg/m ³ Notes: Polvere di silice cristallina respirabile, frazione inalabile. (R), A2 - Pulm fibrosis, lung cancer. Directive 2017/2398
	NATION Avstrija AL	Long Term: 0.05 mg/m ³ Notes: MAK, III C, A Source: BGBl. II Nr. 156/2021
	NATION Belgija AL	Long Term: 0.1 mg/m ³ Notes: C Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	NATION Danska AL	Long Term: 0.3 mg/m ³ Source: BEK nr 2203 af 29/11/2021
		Long Term: 0.1 mg/m ³ Notes: EK Source: BEK nr 2203 af 29/11/2021
	NATION Španija AL	Long Term: 0.05 mg/m ³ (8h) Notes: Respirable fraction Source: LEP 2022
	NATION Estonija AL	Long Term: 0.1 mg/m ³ Notes: 1, C Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
	NATION Finska AL	Long Term: 0.05 mg/m ³ Notes: alveolijae, liite 3 Source: HTP-ARVOT 2020
	NATION Francija AL	Long Term: 0.1 mg/m ³ Notes: La VLEP s'applique à la fraction alvéolaire. Forme de silice cristalline. Source: INRS outil65, article R. 4412-149 du Code du travail
	NATION Hrvaška AL	Long Term: 0.1 mg/m ³ Source: NN 1/2021
	NATION Madžarska AL	Long Term: 0.1 mg/m ³ (8h) Notes: Respirable aerosol Source: 5/2020. (II. 6.) ITM rendelet
	NATION Irska AL	Long Term: 0.1 mg/m ³ (8h) Notes: Respirable fraction Source: 2021 Code of Practice
	NATION Italija AL	Long Term: 0.1 mg/m ³ (8h) Notes: Polvere di silice cristallina respirabile (frazione inalabile). D.Lgs 81/2008 Source: D.lgs. 81/2008, Allegato XLIII
	NATION Litva AL	Long Term: 0.1 mg/m ³ Notes: Žiūrėti 1 priedo 3 punktą. Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
	NATION Nizozemska AL	Long Term: 0.075 mg/m ³ Notes: (2) Source: Arbeidsomstandighedenregeling - Lijst B1
	NATION Norveška AL	Long Term: 0.3 mg/m ³ Notes: K 7 Source: FOR-2021-06-28-2248
		Long Term: 0.05 mg/m ³ Notes: K G 7 21 Source: FOR-2021-06-28-2248
	NATION Poljska AL	Long Term: 0.1 mg/m ³ Notes: 6) Source: Dz.U. 2018 poz. 1286
	NATION Švedska AL	Long Term: 0.1 mg/m ³ Notes: C, M, 3 Source: AFS 2021:3
	SUVA Švicar	Long Term: 0.15 mg/m ³ Notes: TWA mg/m ³ : (a), C1A, SSC, P, Cancpulm Silicose / Lugenkrebs Silikose, HSE NIOSH OSHA Source: suva.ch/valeurs-limites

Titanium dioxide

CAS: 13463-67-7

ACGIH	Long Term: 2.5 mg/m ³ (8h) Notes: Finescale particles; R ; A3 - LRT irr, pneumoconiosis
NATION Avstrija AL	Long Term: 5 mg/m ³ ; Short Term: 10 mg/m ³ Notes: 60(Miw), 2x, MAK, A Source: BGBl. II Nr. 156/2021
NATION Belgija AL	Long Term: 10 mg/m ³ Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
NATION Bolgarija AL	Long Term: 10 mg/m ³ Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
NATION Nemčija AL	Long Term: 0.3 mg/m ³ ; Short Term: 2.4 mg/m ³ Notes: DFG; Long term and short term: excluding ultrafine particles; respirable fraction; multiplied by the material density; Source: TRGS900
NATION Danska AL	Long Term: 6 mg/m ³ Notes: K Source: BEK nr 2203 af 29/11/2021
NATION Španija AL	Long Term: 10 mg/m ³ Source: LEP 2022
NATION Estonija AL	Long Term: 5 mg/m ³ Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
NATION Francija AL	Long Term: 10 mg/m ³ Notes: Cancérogène de catégorie 2 Source: INRS outil65
NATION Grčija AL	Long Term: 10 mg/m ³ Notes: εισπν. Source: ΦΕΚ 94/Α` 13.5.1999
	Long Term: 5 mg/m ³ Notes: avanv. Source: ΦΕΚ 94/Α` 13.5.1999
NATION Hrvaška AL	Long Term: 10 mg/m ³ Notes: U Source: NN 1/2021
	Long Term: 4 mg/m ³ Notes: R Source: NN 1/2021
NATION Irska AL	Long Term: 10 mg/m ³ Source: 2021 Code of Practice
	Long Term: 4 mg/m ³ Source: 2021 Code of Practice
NATION Litva AL	Long Term: 5 mg/m ³ Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
NATION Latvija AL	Long Term: 10 mg/m ³ Source: KN325P1
NATION Norveška AL	Long Term: 5 mg/m ³ Source: FOR-2021-06-28-2248
NATION Poljska AL	Long Term: 10 mg/m ³ Notes: 4), 7) Source: Dz.U. 2018 poz. 1286
NATION Romunija AL	Long Term: 10 mg/m ³ ; Short Term: 15 mg/m ³ Source: Republicarea 1 - nr. 743 din 29 iulie 2021
NATION Slovaška AL	Long Term: 5 mg/m ³ Source: 355 NARIADENIE VLÁDY z 10. mája 2006
NATION Švedska AL	Long Term: 5 mg/m ³ Notes: 3 Source: AFS 2021:3
SUVA Švicar	Long Term: 3 mg/m ³

Propylidynetrimethanol

CAS: 77-99-6 NATION Litva
AL Short Term: Ceiling - 5 ppm
Notes: Ū
Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389

NATION Švedska
AL Long Term: 5 mg/m3
Source: AFS 2021:3

fosforjeva kislina

CAS: 7664-38-2 ACGIH Long Term: 1 mg/m3 (8h); Short Term: 3 mg/m3
Notes: URT, eye and skin irr

EU Long Term: 1 mg/m3 (8h); Short Term: 2 mg/m3

NATION Avstrija
AL Long Term: 1 mg/m3; Short Term: 2 mg/m3
Notes: 15(Miw), 4x, MAK
Source: BGBl. II Nr. 156/2021

NATION Belgija
AL Long Term: 1 mg/m3; Short Term: 2 mg/m3
Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1

NATION Bolgarija
AL Long Term: 1 mg/m3; Short Term: 2 mg/m3
Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.

NATION Ciper
AL Long Term: 1 mg/m3; Short Term: 2 mg/m3
Source: Οι περί Ασφάλειας και Υγείας στην Εργασία (Χημικοί Παράγοντες) Κανονισμοί του 2001 έως 2021

NATION Češka
AL Long Term: 1 mg/m3; Short Term: Ceiling - 2 mg/m3
Source: Nařízení vlády č. 361-2007 Sb

NATION Nemčija
AL Long Term: 2 mg/m3
Notes: DFG, EU, AGS, Y, E, 2(I)
Source: TRGS 900

NATION Danska
AL Long Term: 1 mg/m3
Notes: E
Source: BEK nr 2203 af 29/11/2021

NATION Španija
AL Long Term: 1 mg/m3; Short Term: 2 mg/m3
Notes: VLI, s
Source: LEP 2022

NATION Estonija
AL Long Term: 1 mg/m3; Short Term: 2 mg/m3
Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105

NATION Finska
AL Long Term: 1 mg/m3; Short Term: 2 mg/m3
Source: HTP-ARVOT 2020

NATION Francija
AL Long Term: 1 mg/m3 - 0.2 ppm; Short Term: 2 mg/m3 - 0.5 ppm
Source: INRS outil65, arrêté du 30-06-2004 modifié

NATION Grčija
AL Long Term: 1 mg/m3; Short Term: 3 mg/m3
Source: ΦΕΚ 94/Α` 13.5.1999

NATION Hrvatska
AL Long Term: 1 mg/m3; Short Term: 2 mg/m3
Source: 2000/39/EZ

NATION Madžarska
AL Long Term: 1 mg/m3; Short Term: 2 mg/m3
Notes: m, EU1, N
Source: 5/2020. (II. 6.) ITM rendelet

NATION Irska
AL Long Term: 1 mg/m3; Short Term: 2 mg/m3
Notes: IOELV
Source: 2021 Code of Practice

NATION Italija
AL Long Term: 1 mg/m3; Short Term: 2 mg/m3
Source: D.lgs. 81/2008, Allegato XXXVIII

NATION Litva
AL Long Term: 1 mg/m3; Short Term: 2 mg/m3
Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389

NATION Luksemburg
AL Long Term: 1 mg/m3; Short Term: 2 mg/m3
Source: Mémorial A n.226 du 22 mars 2021

NATION AL	Latvija	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³ Source: KN325P1
NATION AL	Malta	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³ Source: S.L.424.24
NATION AL	Nizozemska	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³ Source: Arbeidsomstandighedenregeling - Lijst A
NATION AL	Norveška	Long Term: 1 mg/m ³ Notes: E Source: FOR-2021-06-28-2248
NATION AL	Poljska	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³ Source: Dz.U. 2018 poz. 1286
NATION AL	Portugalska	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³ Source: Decreto-Lei n.º 1/2021
NATION AL	Romunija	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³ Notes: Dir. 2000/39 Source: Republicarea 1 - nr. 743 din 29 iulie 2021
NATION AL	Slovaška	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³ Source: 355 NARIADENIE VLÁDY z 10. mája 2006
NATION AL	Slovenija	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³ Notes: Y, EU1, (I) Source: UL št. 72, 11. 5. 2021
NATION AL	Švedska	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³ Source: AFS 2021:3
WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 1 mg/m ³ ; Short Term: 2 mg/m ³ Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
SUVA	Švicar	Long Term: 2 mg/m ³ ; Short Term: 4 mg/m ³ Notes: TWA mg/m ³ : (i), SSC, Poumons VRS Peau Yeux / Lunge OAW Haut Auge, NIOSH OSHA Source: suva.ch/valeurs-limites

metanol

CAS: 67-56-1

ACGIH		Long Term: 200 ppm (8h); Short Term: 250 ppm Notes: Skin, BEI - Headache, eye dam, dizziness, nausea
EU		Long Term: 260 mg/m ³ - 200 ppm (8h) Notes: Skin
NATION AL	Avstrija	Long Term: 260 mg/m ³ - 200 ppm; Short Term: 1040 mg/m ³ - 800 ppm Notes: 15(Miw), 4x, MAK, H Source: BGBl. II Nr. 156/2021
NATION AL	Belgija	Long Term: 266 mg/m ³ - 200 ppm; Short Term: 333 mg/m ³ - 250 ppm Notes: D Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
NATION AL	Bolgarija	Long Term: 260 mg/m ³ - 200 ppm Notes: Кожа Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
NATION AL	Ciper	Long Term: 260 mg/m ³ - 200 ppm Notes: δέρμα Source: Οι περί Ασφάλειας και Υγείας στην Εργασία (Χημικοί Παράγοντες) Κανονισμοί του 2001 έως 2021
NATION AL	Česka	Long Term: 250 mg/m ³ ; Short Term: Ceiling - 1000 mg/m ³ Notes: D, B Source: Nařízení vlády č. 361-2007 Sb
NATION AL	Nemčija	Long Term: 130 mg/m ³ - 100 ppm Notes: DFG, EU, H, Y, 2(II) Source: TRGS 900
NATION AL	Danska	Long Term: 260 mg/m ³ - 200 ppm Notes: EH Source: BEK nr 2203 af 29/11/2021

NATION Španija AL	Long Term: 266 mg/m ³ - 200 ppm Notes: vía dérmica, VLB®, VLI, r Source: LEP 2022
NATION Estonija AL	Long Term: 250 mg/m ³ - 200 ppm; Short Term: 350 mg/m ³ - 250 ppm Notes: A Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
NATION Finska AL	Long Term: 270 mg/m ³ - 200 ppm; Short Term: 330 mg/m ³ - 250 ppm Notes: iho Source: HTP-ARVOT 2020
NATION Francija AL	Long Term: 260 mg/m ³ - 200 ppm; Short Term: 1300 mg/m ³ - 1000 ppm Notes: Risque de pénétration percutanée Source: INRS outil65, article R. 4412-149 du Code du travail
NATION Grčija AL	Long Term: 260 mg/m ³ - 200 ppm; Short Term: 325 mg/m ³ - 250 ppm Notes: Δ Source: ΦΕΚ 94/A` 13.5.1999
NATION Hrvaška AL	Long Term: 260 mg/m ³ - 200 ppm Notes: koža Source: 2006/15/EZ
NATION Madžarska AL	Long Term: 260 mg/m ³ Notes: b, i, BEM, EU2, R+T Source: 5/2020. (II. 6.) ITM rendelet
NATION Irska AL	Long Term: 260 mg/m ³ - 200 ppm Notes: Sk, IOELV Source: 2021 Code of Practice
NATION Italija AL	Long Term: 260 mg/m ³ - 200 ppm Notes: Cute Source: D.lgs. 81/2008, Allegato XXXVIII
NATION Litva AL	Long Term: 260 mg/m ³ - 200 ppm Notes: O Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
NATION Luksemburg AL	Long Term: 260 mg/m ³ - 200 ppm Notes: Peau Source: Mémorial A n.226 du 22 mars 2021
NATION Latvija AL	Long Term: 260 mg/m ³ - 200 ppm Notes: Āda Source: KN325P1
NATION Malta AL	Long Term: 260 mg/m ³ - 200 ppm Notes: skin Source: S.L.424.24
NATION Nizozemska AL	Long Term: 133 mg/m ³ Notes: H Source: Arbeidsomstandighedenregeling - Lijst A
NATION Norveška AL	Long Term: 130 mg/m ³ - 100 ppm Notes: H E Source: FOR-2021-06-28-2248
NATION Poljska AL	Long Term: 100 mg/m ³ ; Short Term: 300 mg/m ³ Notes: skóra Source: Dz.U. 2018 poz. 1286
NATION Portugalska AL	Long Term: 260 mg/m ³ - 200 ppm Notes: Cutânea Source: Decreto-Lei n.º 1/2021
NATION Romunija AL	Long Term: 260 mg/m ³ - 200 ppm Notes: P, Dir. 2006/15 Source: Republicarea 1 - nr. 743 din 29 iulie 2021
NATION Slovaška AL	Long Term: 260 mg/m ³ - 200 ppm Notes: K, 7) Source: 355 NARIADENIE VLÁDY z 10. mája 2006
NATION Slovenija AL	Long Term: 260 mg/m ³ - 200 ppm; Short Term: 1040 mg/m ³ - 800 ppm Notes: K, Y, BAT, EU2 Source: UL št. 72, 11. 5. 2021

NATION Švedska AL	Long Term: 250 mg/m ³ - 200 ppm; Short Term: 350 mg/m ³ - 250 ppm Notes: H, V Source: AFS 2021:3
WEL- UNITED EH40 KINGDOM OF GREAT Notes: Sk BRITAIN AND Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020) NORTHERN IRELAND	
SUVA Švicar	Long Term: 260 mg/m ³ - 200 ppm; Short Term: 520 mg/m ³ - 400 ppm Notes: R/H, SSC, B, SNC / ZNS, INRS NIOSH Source: suva.ch/valeurs-limites

Biological limit values

metanol

CAS: 67-56-1 Biological Indicator: Methyl alcohol; Sampling Period: End of turn; End of working week
Value: 30 mg/L; Medium: Urine

Predicted No Effect Concentration (PNEC) values

bis-[4-(2,3-epoksipropoksi)fenil]propan

CAS: 1675-54-3 Exposure Route: Fresh Water; PNEC Limit: 0.006 mg/l
Exposure Route: Marine water; PNEC Limit: 600 ng/L
Exposure Route: Freshwater sediments; PNEC Limit: 0.996 mg/kg
Exposure Route: Usedline morske vode; PNEC Limit: 0.099 mg/kg
Exposure Route: Zemlja; PNEC Limit: 0.196 mg/kg
Exposure Route: Mikroorganizmi v čiščenju odpad; PNEC Limit: 10 mg/l
Exposure Route: Intermittent releases (fresh water); PNEC Limit: 0.018 mg/l

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-{[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane

Exposure Route: Fresh Water; PNEC Limit: 3 mg/m³
Exposure Route: Intermittent releases (fresh water); PNEC Limit: 25.4 mg/m³
Exposure Route: Marine water; PNEC Limit: 300 ng/L
Exposure Route: Mikroorganizmi v čiščenju odpad; PNEC Limit: 10 mg/l
Exposure Route: Freshwater sediments; PNEC Limit: 294 µg/kg
Exposure Route: Usedline morske vode; PNEC Limit: 29.4 µg/kg
Exposure Route: Zemlja; PNEC Limit: 237 µg/kg

oksiran, mono[(C12-14-alkiloksi)metil] derivati

CAS: 68609-97-2 Exposure Route: Fresh Water; PNEC Limit: 0.007 mg/l
Exposure Route: Marine water; PNEC Limit: 0.072 mg/m³
Exposure Route: Mikroorganizmi v čiščenju odpad; PNEC Limit: 10 mg/l
Exposure Route: Freshwater sediments; PNEC Limit: 66.77 mg/kg
Exposure Route: Usedline morske vode; PNEC Limit: 6.677 mg/kg
Exposure Route: Zemlja; PNEC Limit: 80.12 mg/kg
Exposure Route: Intermittent releases (fresh water); PNEC Limit: 0.072 mg/l

4-morpholinecarbaldehyde

CAS: 4394-85-8 Exposure Route: Fresh Water; PNEC Limit: 500 mg/m³
Exposure Route: Intermittent releases (fresh water); PNEC Limit: 5 mg/l
Exposure Route: Marine water; PNEC Limit: 50 mg/m³
Exposure Route: Marine water; PNEC Limit: 2000 mg/l
Exposure Route: Freshwater sediments; PNEC Limit: 2.69 mg/kg
Exposure Route: Usedline morske vode; PNEC Limit: 269 µg/kg
Exposure Route: Zemlja; PNEC Limit: 244 µg/kg

metanol

CAS: 67-56-1 Exposure Route: Fresh Water; PNEC Limit: 20.8 mg/l
Exposure Route: Intermittent releases (fresh water); PNEC Limit: 1540 mg/l
Exposure Route: Marine water; PNEC Limit: 2.08 mg/l

Exposure Route: Mikroorganizmi v čiščenju odpadkov; PNEC Limit: 100 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 77 mg/kg

Exposure Route: Usedline morske vode; PNEC Limit: 7.7 mg/kg

Exposure Route: Zemlja; PNEC Limit: 100 mg/kg

Derived No Effect Level (DNEL) values

bis-[4-(2,3-epoksipropoksi)fenil]propan

CAS: 1675-54-3 Exposure Route: Human Oral; Exposure Frequency: Long Term, local effects
Worker Professional: 0.75 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Worker Professional: 0.75 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 3.571 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Long Term, local effects
Worker Professional: 3.571 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 12.25 mg/kg/day

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Professional: 12.25 mg/kg/day

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 29.39 mg/kg/day; Consumer: 8.7 mg/kg/day

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 104.15 mg/kg; Consumer: 62.5 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 6.25 mg/kg

oksiran, mono[(C12-14-alkiloksi)metil] derivati

CAS: 68609-97-2 Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects
Worker Professional: 17 mg/kg; Consumer: 10 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
Worker Professional: 29 mg/kg/day; Consumer: 7.6 mg/kg/day

Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects
Consumer: 1219 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Short Term, local effects
Worker Professional: 68 mg/kg; Consumer: 40 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Worker Professional: 9.8 mg/kg/day; Consumer: 2.9 mg/kg/day

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 3.9 mg/kg; Consumer: 2.35 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 13.8 mg/kg/day; Consumer: 4.1 mg/kg/day

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 1 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Long Term, local effects
Worker Professional: 1.7 mg/kg; Consumer: 1 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Professional: 0.98 mg/kg; Consumer: 1.46 mg/kg

4-morpholinecarbaldehyde

CAS: 4394-85-8 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 98 mg/kg/day; Consumer: 29 mg/kg/day

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Professional: 1.7 mg/kg/day; Consumer: 840 µg/m³

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects

Worker Professional: 14 mg/kg; Consumer: 8 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Long Term, local effects
Worker Professional: 0.293 mg/cm²; Consumer: 176 mg/cm²

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 8 mg/kg

fosforjeva kislina

CAS: 7664-38-2 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 10.7 mg/kg/day; Consumer: 4.57 mg/kg/day

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Professional: 1 mg/kg/day; Consumer: 360 µg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Worker Professional: 2 mg/kg/day

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 100 µg/kg

metanol

CAS: 67-56-1 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 130 mg/kg/day; Consumer: 26 mg/kg/day

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
Worker Professional: 130 mg/kg/day; Consumer: 26 mg/kg/day

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Professional: 130 mg/kg/day; Consumer: 26 mg/kg/day

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Worker Professional: 130 mg/kg/day; Consumer: 26 mg/kg/day

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 20 mg/kg; Consumer: 4 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects
Worker Professional: 20 mg/kg; Consumer: 4 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 4 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects
Consumer: 4 mg/kg

8.2. Exposure controls

Eye protection:

Očala s stransko zaščito.(EN166)

Protection for skin:

Kemična zaščitna oblačila. Zaščitna obutev

Protection for hands:

Materiali primerni za zaščitne rokavice (EN 374, EN 16523-1:2015+A1:2018: Level 6):

Nitril kavčuk NBR: debeline ≥ 0,4 mm; čas preboja ≥ 480 min.

Butil kavčuk - IIR: debeline ≥ 0,4 mm; čas preboja ≥ 480 min.

Respiratory protection:

Zaščito dihal je treba nositi, ko obstaja možnost, da bo presežena mejna vrednost izpostavljenosti. Če mejnih vrednosti izpostavljenosti ni, nosite zaščito dihal, ko se pojavijo škodljivi učinki, kot sta draženje dihalnih poti ali nelagodje, ali če to kažejo rezultati vaše ocene tveganja.

Uporabljajte naslednje respiratorje za čiščenje zraka, ki jih je odobrila ES: Vložek za organske hlapce, tip A (vrelišče >65 °C).

Thermal Hazards:

Ni predvideno, če se uporablja, kot je predvideno

Environmental exposure controls:

Ne dovolite, da izdelek pride v kanalizacijo ali v površinske ali podzemne vode.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Colour: V skladu z opisom izdelka

Odour: characteristic

Odour threshold:	Not Relevant Notes: Podatek ni na voljo
pH:	N.A.
Kinematic viscosity:	N.A.
Melting point/freezing point:	N.A.
Boiling point or initial boiling point and boiling range:	N.A.
Flash point:	Not applicable
Lower and upper explosion limit:	Not Relevant Notes: Se ne uporablja, ker zmes ni vnetljiva
Relative vapour density:	N.A.
Vapour pressure:	N.A.
Density and/or relative density:	1.50 g/cm ³ Method: ISO 2811
Solubility in water:	N.A.
Solubility in oil:	Not Relevant Notes: Ni določeno, ker ni potrebno za CLP-razvrstitev
Partition coefficient n-octanol/water (log value):	Not Relevant Notes: Ni uporabljivo za zmesi
Auto-ignition temperature:	Not Relevant Notes: Se ne uporablja, ker zmes ni vnetljiva
Decomposition temperature:	Not Relevant Notes: Ni uporabljivo, ker zmes ni samoreaktivna
Flammability:	N.A.
Volatile Organic compounds - VOCs =	0.00%; 0.01g/L
Particle characteristics:	
Particle size:	N.A.

9.2. Other information

Explosive properties:	Not Relevant Notes: Ni uporabljivo, zmes ne vsebuje eksplozivnih skupin
No other relevant information	

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Data not available.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological Information of the Preparation

a) acute toxicity	Not classified Based on available data, the classification criteria are not met
b) skin corrosion/irritation	The product is classified: Skin Irrit. 2(H315)
c) serious eye damage/irritation	The product is classified: Eye Irrit. 2(H319)
d) respiratory or skin sensitisation	The product is classified: Skin Sens. 1B(H317)
e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified Based on available data, the classification criteria are not met
g) reproductive toxicity	The product is classified: Repr. 1B(H360)
h) STOT-single exposure	Not classified Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

bis-[4-(2,3-epoksipropoksi)fenil]propan

CAS: 1675-54-3	a) acute toxicity	LD50 Oral Rabbit = 19800 mg/kg LD50 Skin Rabbit > 20 mg/kg 24h
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes
	d) respiratory or skin sensitisation	Skin Sensitization Positive
	f) carcinogenicity	Genotoxicity Negative Carcinogenicity Oral Rat = 15 mg/kg Carcinogenicity Skin Rat = 1 mg/kg
	g) reproductive toxicity	No Observed Effect Level Oral Rat = 750 mg/kg

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane

a) acute toxicity	LD50 Oral Rat > 5000 mg/kg LD50 Skin Rat > 2000 mg/kg 24h
b) skin corrosion/irritation	Skin Irritant Rabbit Positive 4h
c) serious eye damage/irritation	Eye Irritant Rabbit No
d) respiratory or skin sensitisation	Skin Sensitization Positive
f) carcinogenicity	Genotoxicity Negative
g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 750 mg/kg

oksiran, mono[(C12-14-alkiloksi)metil] derivati

CAS: 68609-97-2	a) acute toxicity	LD50 Oral Rat = 26800 mg/kg LC50 Inhalation Rat > 0.206 mg/l 4h LD50 Skin Rabbit > 4.5 ml/kg 24h
	b) skin corrosion/irritation	Skin Irritant Rabbit Yes
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Positive
	g) reproductive toxicity	No Observed Adverse Effect Level Skin Rat = 200 mg/kg

Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)

CAS: 933999-84-9	a) acute toxicity	LD50 Oral Rat = 3010 mg/kg
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Quarz (SiO2)

CAS: 14808-60-7	Generic information:	Informazione tossicologia a livello di sostanza
	a) acute toxicity	LD50 Oral > 2000 mg/kg
4-morpholinecarbaldehyde		
CAS: 4394-85-8	a) acute toxicity	LD50 Oral Rat > 7360 mg/kg LC50 Inhalation of aerosol Rat > 5.3 mg/l 4h LD50 Skin Rabbit > 18400 mg/kg 24h
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative
	c) serious eye damage/irritation	Eye Irritant Rabbit No
	d) respiratory or skin sensitisation	Skin Sensitization Positive
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 1000 mg/kg
fosforjeva kislina		
CAS: 7664-38-2	a) acute toxicity	LD50 Oral Rat = 2600 mg/kg LC50 Inhalation Rat = 3846 mg/m3 1h
	b) skin corrosion/irritation	Skin Corrosive Rabbit Positive
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat >= 500 mg/kg
metanol		
CAS: 67-56-1	a) acute toxicity	LD50 Oral Rat >= 2528 mg/kg LC50 Inhalation = 43.68 mg/l 6h LD50 Skin Rabbit = 17100 mg/kg
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative
	c) serious eye damage/irritation	Eye Irritant Rabbit No
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Negative
	f) carcinogenicity	Genotoxicity Negative Carcinogenicity Rat Negative
	g) reproductive toxicity	Lowest Observed Adverse Effect Level Oral = 1000 mg/kg

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

Harmful to aquatic life with long lasting effects.

List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 3(H412)

List of Eco-Toxicological properties of the components

bis-[4-(2,3-epoksi)propoksi]fenil]propan

- CAS: 1675-54-3
- a) Aquatic acute toxicity: LC50 Fish Oncorhynchus mykiss = 2 mg/L 96h
 - a) Aquatic acute toxicity: LC50 Daphnia Daphnia magna = 1.8 mg/L 48h
 - a) Aquatic acute toxicity: EC50 Algae Scenedesmus capricornutum = 11 mg/L 72h
 - c) Bacteria toxicity: EC50 Sludge activated sludge = 100 mg/L 3h

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane

- a) Aquatic acute toxicity: LC50 Fish Leuciscus idus = 2.54 mg/L 96h
- a) Aquatic acute toxicity: LC50 Daphnia Daphnia magna = 2.55 mg/L 48h
- b) Aquatic chronic toxicity: NOEC Daphnia Daphnia magna = 0.3 mg/L

a) Aquatic acute toxicity: EC50 Algae *Selenastrum capricornutum* = 1.8 mg/L 72h

a) Aquatic acute toxicity: NOEC Sludge activated sludge = 100 mg/L 3h

oksiran, mono[(C12–14-alkiloksi)metil] derivati

CAS: 68609-97-2 a) Aquatic acute toxicity: LC50 Fish *Oncorhynchus mykiss* > 5000 mg/L 96h

a) Aquatic acute toxicity: NOEC Algae *Pseudokirchneriella subcapitata* = 500 mg/L 72h

a) Aquatic acute toxicity: EC50 Algae *Pseudokirchneriella subcapitata* = 843 mg/L 72h

c) Bacteria toxicity: EC50 Sludge > 100 mg/L

Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)

CAS: 933999-84-9 a) Aquatic acute toxicity: LC50 Fish rainbow trout = 30 mg/L 96h

a) Aquatic acute toxicity: LC50 *Daphnia magna* = 47 mg/L 48h

a) Aquatic acute toxicity: EC50 Algae = 23.1 mg/L 72h

4-morpholinecarbaldehyde

CAS: 4394-85-8 a) Aquatic acute toxicity: LC50 Fish *Leuciscus idus* > 500 mg/L 96h

a) Aquatic acute toxicity: EC50 *Daphnia magna* > 500 mg/L 48h

a) Aquatic acute toxicity: EC50 Algae German Industrial Standard guideline DIN 38412, part 9 = 23.8 g/L 72h

c) Bacteria toxicity: EC10 *Pseudomonas putida* > 2000 mg/L

fosforjeva kislina

CAS: 7664-38-2 a) Aquatic acute toxicity: LC50 *Daphnia magna* > 100 mg/L 48h

a) Aquatic acute toxicity: EC50 Algae *Desmodesmus subspicatus* > 100 mg/L 72h

a) Aquatic acute toxicity: EC50 Sludge activated sludge > 1000 mg/L 3h

metanol

CAS: 67-56-1 a) Aquatic acute toxicity: LC50 Fish *Lepomis macrochirus* = 15400 mg/L 96h

b) Aquatic chronic toxicity: NOEC Fish = 450 mg/L

a) Aquatic acute toxicity: EC50 *Daphnia magna* = 22200 mg/L 48h

b) Aquatic chronic toxicity: NOEC *Daphnia magna* = 208 mg/L

a) Aquatic acute toxicity: EC50 Algae *Selenastrum capricornutum* = 22000 mg/L 96h

d) Terrestrial toxicity: NOEC Worm *Eisenia andrei* = 10000 mg/kg

d) Terrestrial toxicity: NOEC *Folsomia candida* = 1000 mg/kg

12.2. Persistence and degradability

bis-[4-(2,3-epoksi)propoksi]fenil]propan

CAS: 1675-54-3 Non-readily biodegradable

Test: Oxygen consumption

Notes: OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane

Non-readily biodegradable

Value: 16

Notes: 28days

oksiran, mono[(C12–14-alkiloksi)metil] derivati

CAS: 68609-97-2 Readily biodegradable

Test: Oxygen consumption; Value: 87

Notes: %; OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)

Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)

CAS: 933999-84-9 Non-readily biodegradable

4-morpholinecarbaldehyde

CAS: 4394-85-8 Readily biodegradable

Test: Dissolved organic carbon; Value: 96

Notes: %; OECD 301 A

metanol

CAS: 67-56-1 Readily biodegradable

12.3. Bioaccumulative potential

bis-[4-(2,3-epoksi)propoksi]fenil]propan

CAS: 1675-54-3 Bioaccumulative

Test: BCF - Bioconcentration factor; Value: 31

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane

Bioaccumulative

Test: BCF - Bioconcentration factor; Value: 150

oksiran, mono[(C12-14-alkiloksi)metil] derivati

CAS: 68609-97-2 Bioaccumulative

Test: BCF - Bioconcentration factor; Value: 160

Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)

CAS: 933999-84-9 Bioaccumulative

Test: BCF - Bioconcentration factor; Value: 3.57

4-morpholinecarbaldehyde

CAS: 4394-85-8 Bioaccumulative

Test: BCF - Bioconcentration factor; Value: 1.9

metanol

CAS: 67-56-1 Not bioaccumulative

Test: BCF - Bioconcentration factor

Notes: < 10

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

Ni sestavine PBT/vPvB.

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration $\geq 0.1\%$

12.7. Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Če je mogoče, predelajte. Pošljite v usposobljena odlagališča ali v zažig pod kontroliranimi pogoji. Ravnajte se po lokalnih in državnih normah. Odstranjevanje z izpustom v odpadne vode ni dovoljeno

Odstranjeni izdelek mora biti v skladu z Uredbo (EU) 1357/2014 razvrščen kot nevaren odpadek

Šifre odpadkov v skladu z Evropski seznam odpadkov (ESO) ni mogoče določiti zaradi odvisnosti od uporabe. Obrnite se na pooblaščen službo za odstranjevanje odpadkov.

Properties of waste which render it hazardous (Annex III, Directive 2008/98/EC):

Tekoča zmes zaradi strjevanja ali izpostavljenosti vročini izgubi svoje prvotne tehnične značilnosti in je ob odstranjevanju v trdnem stanju; v tem primeru morajo zaposleni ravnati v skladu z zahtevami, ki izhajajo iz nacionalne zakonodaje o varnosti na delovnem mestu.

Zaposleno osebje mora med ravnanjem z izdelkom sprejeti ustrezne tehnične ukrepe, kot je lokalizirano sesanje in uporaba nepredušnih posod za omejevanje širjenja prahu ter nositi masko s filtrom P3

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number or ID number

N/A

14.2. UN proper shipping name

ADR-Shipping Name: N/A

IATA-Shipping Name: N/A

IMDG-Shipping Name: N/A

14.3. Transport hazard class(es)

ADR-Class: N/A

IATA-Class: N/A

IMDG-Class: N/A

14.4. Packing group

ADR-Packing Group: N/A

IATA-Packing group: N/A

IMDG-Packing group: N/A

14.5. Environmental hazards

Marine pollutant: No

Environmental Pollutant: No

IMDG-EMS: N/A

14.6. Special precautions for user

Road and Rail (ADR-RID):

ADR-Label: N/A

ADR - Hazard identification number: N/A

ADR-Special Provisions: N/A
ADR-Transport category (Tunnel restriction code): N/A
ADR Limited Quantities: N/A
ADR Excepted Quantities: N/A

Air (IATA):

IATA-Passenger Aircraft: N/A
IATA-Cargo Aircraft: N/A
IATA-Label: N/A
IATA-Subsidiary hazards: N/A
IATA-Erg: N/A
IATA-Special Provisions: N/A

Sea (IMDG):

IMDG-Stowage and handling: N/A
IMDG-Segregation: N/A
IMDG-Subsidiary hazards: N/A
IMDG-Special Provisions: N/A

14.7. Maritime transport in bulk according to IMO instruments

N.A.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EU) n. 2020/878

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP)

Regulation (EU) n. 2021/849 (ATP 17 CLP)

Regulation (EU) n. 2022/692 (ATP 18 CLP)

Regulation (EU) n. 2023/707

Regulation (EU) n. 2023/1434 (ATP 19 CLP)

Regulation (EU) n. 2023/1435 (ATP 20 CLP)

Regulation (EU) n. 2024/197 (ATP 21 CLP)

Regulation (EU) n. 2024/2564 (ATP 22 CLP)

Regulation (EU) n. 2024/2865

Regulation (EU) n. 2025/1222 (ATP 23 CLP)

Regulation (EC) nr 648/2004 (Detergents).

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

Restrictions related to the product: 3

Restrictions related to the substances contained: 40, 69, 75

Provisions related to directive EU 2012/18 (Seveso III):

None

Explosives precursors – Regulation 2019/1148

No substances listed

Regulation (EU) No 649/2012 (PIC regulation)

No substances listed

German Water Hazard Class.

Razred 3: izjemno nevarna.

German Lagerklasse according to TRGS 510:

LGK 6.1C

SVHC Substances:

No SVHC substances present in concentration $\geq 0.1\%$

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

Substances for which a Chemical Safety Assessment has been carried out:

bis-[4-(2,3-epoksipropoksi)fenil]propan

oksiran, mono[(C12-14-alkiloksi)metil] derivati

Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)

SECTION 16: Other information

Code	Description
H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H360	May damage fertility or the unborn child.
H360F	May damage fertility.
H370	Causes damage to organs.
H371	May cause damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
2.6/2	Flam. Liq. 2	Flammable liquid, Category 2
3.1/3/Dermal	Acute Tox. 3	Acute toxicity (dermal), Category 3
3.1/3/Inhal	Acute Tox. 3	Acute toxicity (inhalation), Category 3
3.1/3/Oral	Acute Tox. 3	Acute toxicity (oral), Category 3
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.4.2/1B	Skin Sens. 1B	Skin Sensitisation, Category 1B
3.7/1B	Repr. 1B	Reproductive toxicity, Category 1B
3.8/1	STOT SE 1	Specific target organ toxicity — single exposure, Category 1
3.8/2	STOT SE 2	Specific target organ toxicity — single exposure, Category 2
3.9/1	STOT RE 1	Specific target organ toxicity — repeated exposure, Category 1
4.1/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008**[CLP]:**

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1B, H317	Calculation method
Repr. 1B, H360	Calculation method
Aquatic Chronic 3, H412	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ATE: Acute Toxicity Estimate
ATEmix: Acute toxicity Estimate (Mixtures)
BCF: Biological Concentration Factor
BEI: Biological Exposure Index
BOD: Biochemical Oxygen Demand
CAS: Chemical Abstracts Service (division of the American Chemical Society).
CAV: Poison Center
CE: European Community
CLP: Classification, Labeling, Packaging.
CMR: Carcinogenic, Mutagenic and Reprotoxic
COD: Chemical Oxygen Demand
COV: Volatile Organic Compound
CSA: Chemical Safety Assessment
CSR: Chemical Safety Report
DMEL: Derived Minimal Effect Level
DNEL: Derived No Effect Level.
DPD: Dangerous Preparations Directive
DSD: Dangerous Substances Directive
EC50: Half Maximal Effective Concentration
ECHA: European Chemicals Agency
EINECS: European Inventory of Existing Commercial Chemical Substances.
ES: Exposure Scenario
GefStoffVO: Ordinance on Hazardous Substances, Germany.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
IC50: half maximal inhibitory concentration
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.
IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KAFH: Keep Away From Heat
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- Safety Data Sheet
- SECTION 1: Identification of the substance/mixture and of the company/undertaking
- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 7: Handling and storage
- SECTION 8: Exposure controls/personal protection
- SECTION 9: Physical and chemical properties
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 15: Regulatory information
- SECTION 16: Other information

Scenarij izpostavljenosti

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

Scenarij izpostavljenosti, 07/06/2021

Identiteta snovi	
	bis-[4-(2,3-epoxipropoxi)phenyl]propane
št.CAS	1675-54-3
Št. INDEKSA	603-073-00-2
št.EINECS	216-823-5
Registracijska številka	01-2119456619-26

Kazalo

1. ES 1 Široko razširjena uporaba, ki jo izvajajo poklicni delavci; ESC2_0000001

1.1 NASLOVNI ODSTAVEK

Ime scenarija izpostavljenosti	Gospodarska uporaba premazov in barv - Sredstvo za jedkanje - Smole (predpolimeri) - Spodbujevalec sprejemljivosti
Datum - revizija	27/05/2021 - 1.0
Stopnja življenjskega cikla	Široko razširjena uporaba, ki jo izvajajo poklicni delavci
Glavna uporabniška skupina	Poklicne uporabe
Sektor(-ji) uporabe	Poklicne uporabe (SU22)
Kategorije izdelkov	ESC2_0000001
Kategorije proizvodov	Drugi izdelki iz kamna, mavca, cementa, stekla ali keramike (AC4g)

Scenarij, ki prispeva Okolje

CS1	ERC8c - ERC8f
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Scenarij, ki prispeva Delojemalec

CS2 Prenosi materiala	PROC8a
CS3 Nanašanje z valjem in čopičem	PROC10
CS4 Nanašanje z valjem, pršenjem in polivanjem	PROC11
CS5 Dejavnosti mešanja - Ročno	PROC19

1.2 Pogoji uporabe z vplivom na izpostavitve**1.2. CS1: Scenarij, ki prispeva Okolje (ERC8c, ERC8f)**

Kategorije sproščanja v okolje	Široko razširjena uporaba, rezultat katere je vključitev v ali na izdelek (notranja) - Široko razširjena uporaba, rezultat katere je vključitev v ali na izdelek (zunanja) (ERC8c, ERC8f)
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Lastnosti izdelka (proizvoda)**Fizikalna oblika izdelka:**

Tekočina, parni tlak < 0,5 kPa pri STP

Koncentracija substance v produktu:

Obsega delež snovi v izdelku do 100 %.

Uporabljena količina, pogostost in trajanje uporabe/(ali amortizacijska doba)**Uporabljene količine:**

Dnevna količina na lokacijo = 175 kg/dan

Tip izločanja: Kontinuirano izločanje**Dnevi emisij:** 365 dnevi na leto**Tehnični in organizacijski pogoji in ukrepi****Kontrolni ukrepi za preprečevanje izpustov**

Predpisani učinek čiščenja odpadnih voda na izvoru (%):

Pogoji in ukrepi v zvezi s komunalnimi čistilnimi napravami**Vrsta čistilne naprave (STP):**

Komunalna STP čistilna naprava

STP odpadne vode (m3/dan): 2**Pogoji in meritve v zvezi z obdelavo odpadkov (vključno z odpadki izdelka)****Ravnanje z odpadki**

Posode in kontejnerje za odpadke odstranite v skladu z lokalnimi predpisi.

Drugi pogoji uporabe, ki vplivajo na izpostavljenost okolja	
Krajevni faktor razredčenja morske vode:: 100 Krajevni faktor razredčenja sladke vode: 10 Pretok sprejemnih površinskih voda: 18000 m3/dan Zajema notranjo in zunanjo uporabo	
1.2. CS2: Scenarij, ki prispeva Delojemalec: Prenosi materiala (PROC8a)	
Kategorije procesov	Prenos snovi ali zmesi (polnjenje in praznjenje) na nenamenskih napravah (PROC8a)
Lastnosti izdelka (proizvoda)	
Fizikalna oblika izdelka: Tekočina, parni tlak < 0,5 kPa pri STP Koncentracija substance v produktu: Obsega delež snovi v izdelku do 100 %.	
Uporabljena količina, pogostost in trajanje uporabe/izpostavljenost	
Trajanje: Obsega dnevno izpostavljenost do 8 ure	
Tehnični in organizacijski pogoji in ukrepi	
Tehnični in organizacijski ukrepi Izogibajte se dejavnosti z izpostavljenostjo daljšo od 4 ure.	
Pogoji in ukrepi glede na osebno zaščito, higieno in preverjanje zdravstvenega stanja	
Osebna zaščitna oprema Pri osnovnem usposabljanju uslužbencev nosite kemično odporne rokavice (preizkušene po EN374).	
Drugi pogoji uporabe, ki vplivajo na izpostavljenost delojemalcev	
Temperatura: Predpostavljena je uporaba pri temperaturah ki ne presegajo temperaturo okolice za več kot 20 °C.	
1.2. CS3: Scenarij, ki prispeva Delojemalec: Nanašanje z valjem in čopičem (PROC10)	
Kategorije procesov	Nanašanje z valjčkom ali čopičem (PROC10)
Lastnosti izdelka (proizvoda)	
Fizikalna oblika izdelka: Tekočina, parni tlak < 0,5 kPa pri STP Koncentracija substance v produktu: Obsega delež snovi v izdelku do 100 %.	
Uporabljena količina, pogostost in trajanje uporabe/izpostavljenost	
Trajanje: Obsega dnevno izpostavljenost do 8 ure	
Tehnični in organizacijski pogoji in ukrepi	
Tehnični in organizacijski ukrepi Izogibajte se dejavnosti z izpostavljenostjo daljšo od 4 ure.	
Pogoji in ukrepi glede na osebno zaščito, higieno in preverjanje zdravstvenega stanja	
Osebna zaščitna oprema Pri osnovnem usposabljanju uslužbencev nosite kemično odporne rokavice (preizkušene po EN374).	
Drugi pogoji uporabe, ki vplivajo na izpostavljenost delojemalcev	
Temperatura: Predpostavljena je uporaba pri temperaturah ki ne presegajo temperaturo okolice za več kot 20 °C.	
1.2. CS4: Scenarij, ki prispeva Delojemalec: Nanašanje z valjem, pršenjem in polivanjem (PROC11)	
Kategorije procesov	Neindustrijsko brizganje (PROC11)
Lastnosti izdelka (proizvoda)	
Fizikalna oblika izdelka:	

Tekočina, parni tlak < 0,5 kPa pri STP

Koncentracija substance v produktu:

Obsega delež snovi v izdelku do 100 %.

Uporabljena količina, pogostost in trajanje uporabe/izpostavljenost

Trajanje:

Obsega dnevno izpostavljenost do 8 ure

Tehnični in organizacijski pogoji in ukrepi

Tehnični in organizacijski ukrepi

Izogibajte se dejavnosti z izpostavljenostjo daljšo od 4 ure.

Pogoji in ukrepi glede na osebno zaščito, higieno in preverjanje zdravstvenega stanja

Osebna zaščitna oprema

Pri osnovnem usposabljanju uslužbencev nosite kemično odporne rokavice (preizkušene po EN374).

Uporabljajte ustrezno zaščito za obraz.

Nositi nepropustno delovno obleko.

Nosite respirator skladno z EN140.

Drugi pogoji uporabe, ki vplivajo na izpostavljenost delojemalcev

Temperatura: Predpostavljena je uporaba pri temperaturah ki ne presegajo temperaturo okolice za več kot 20 °C.

1.2. CS5: Scenarij, ki prispeva Delojemalec: Dejavnosti mešanja - Ročno (PROC19)

Kategorije procesov

Ročne dejavnosti, ki vključujejo ročni stik (PROC19)

Lastnosti izdelka (proizvoda)

Fizikalna oblika izdelka:

Tekočina, parni tlak < 0,5 kPa pri STP

Koncentracija substance v produktu:

Obsega delež snovi v izdelku do 100 %.

Uporabljena količina, pogostost in trajanje uporabe/izpostavljenost

Trajanje:

Obsega dnevno izpostavljenost do 8 ure

Tehnični in organizacijski pogoji in ukrepi

Tehnični in organizacijski ukrepi

Izogibajte se dejavnosti z izpostavljenostjo daljšo od 1 ura.

Pogoji in ukrepi glede na osebno zaščito, higieno in preverjanje zdravstvenega stanja

Osebna zaščitna oprema

Pri osnovnem usposabljanju uslužbencev nosite kemično odporne rokavice (preizkušene po EN374).

Drugi pogoji uporabe, ki vplivajo na izpostavljenost delojemalcev

Temperatura: Predpostavljena je uporaba pri temperaturah ki ne presegajo temperaturo okolice za več kot 20 °C.

1.3 Ocena izpostavljenosti in sklicevanje na njen vir

1.3. CS1: Scenarij, ki prispeva Okolje (ERC8c, ERC8f)

cilj zaščite	Stopnja izpostavljenosti	Metoda izračuna	Stopnja opredelitve tveganja (RCR)
sladka voda	= 0.0022 mg/L	EUSES	= 0.00022
morske usedline	= 0.00127 mg/L	EUSES	= 0.0128
sladkovodne usedline	= 0.012 mg/L	EUSES	= 0.0369
morska voda	= 2.34E-05 mg/L	EUSES	= 0.029

tla	= 0.00142 mg/kg suha teža	EUSES	= 0.00722
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1.3. CS2: Scenarij, ki prispeva Delojemalec: Prenosi materiala (PROC8a)

Pot izpostavljenosti, Učinki na zdravje, Indikatorji izpostavljenosti	Stopnja izpostavljenosti	Metoda izračuna	Stopnja opredelitve tveganja (RCR)
inhalacijski, sistemsko, dolgoročno	= 0.84 mg/m ³	ECETOC TRA Delojemalec v2.0	0.07
stik s kožo, sistemsko, dolgoročno	= 0.2742 mg/kg bw/dan	ECETOC TRA Delojemalec v2.0	= 0.03

1.3. CS3: Scenarij, ki prispeva Delojemalec: Nanašanje z valjem in čopičem (PROC10)

Pot izpostavljenosti, Učinki na zdravje, Indikatorji izpostavljenosti	Stopnja izpostavljenosti	Metoda izračuna	Stopnja opredelitve tveganja (RCR)
inhalacijski, sistemsko, dolgoročno	= 5E-07 mg/m ³	ECETOC TRA Delojemalec v2.0	< 0.001
stik s kožo, sistemsko, dolgoročno	= 2.743 mg/kg bw/dan	ECETOC TRA Delojemalec v2.0	= 0.33

1.3. CS4: Scenarij, ki prispeva Delojemalec: Nanašanje z valjem, pršenjem in polivanjem (PROC11)

Pot izpostavljenosti, Učinki na zdravje, Indikatorji izpostavljenosti	Stopnja izpostavljenosti	Metoda izračuna	Stopnja opredelitve tveganja (RCR)
inhalacijski, sistemsko, dolgoročno	= 0.36 mg/m ³	ECETOC TRA Delojemalec v2.0	0.03
stik s kožo, sistemsko, dolgoročno	= 2.68 mg/kg bw/dan	ECETOC TRA Delojemalec v2.0	= 0.32

1.3. CS5: Scenarij, ki prispeva Delojemalec: Dejavnosti mešanja - Ročno (PROC19)

Pot izpostavljenosti, Učinki na zdravje, Indikatorji izpostavljenosti	Stopnja izpostavljenosti	Metoda izračuna	Stopnja opredelitve tveganja (RCR)
inhalacijski, sistemsko, dolgoročno	= 2E-07 mg/m ³	ECETOC TRA Delojemalec v2.0	< 0.001
stik s kožo, sistemsko, dolgoročno	= 1.414 mg/kg bw/dan	ECETOC TRA delojemalec v3	< 0.42
kombinirane poti, sistemsko, dolgoročno	N/A	ECETOC TRA delojemalec v3	= 0.42

1.4 Smernica za uporabnika, za ugotavljanje, ali dela znotraj omejitev scenarija izpostavitve

Vodilo za preverjanje skladnosti s scenarijem izpostavljenosti:

Če so bili sprejeti dodatni ukrepi za upravljanje s tveganji/pogoji za uporabo, morajo uporabniki zagotoviti vsaj enakovredno raven upravljanja s tveganji.

Scenarij izpostavljenosti

Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)

Scenarij izpostavljenosti, 23/07/2021

Identiteta snovi	
	Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)
št.CAS	933999-84-9
št.EINECS	618-939-5
Registracijska številka	01-2119463471-41

Kazalo

1. **ES 1** Široko razširjena uporaba, ki jo izvajajo poklicni delavci; Razni produkti (PC1, PC9a); Gradbeništvo (SU19)

1. ES 1		Široko razširjena uporaba, ki jo izvajajo poklicni delavci; Razni produkti (PC1, PC9a); Gradbeništvo (SU19)
1.1 NASLOVNI ODSTAVEK		
Ime scenarija izpostavljenosti	Gospodarska uporaba premazov in barv	
Datum - revizija	23/07/2021 - 1.0	
Stopnja življenjskega cikla	Široko razširjena uporaba, ki jo izvajajo poklicni delavci	
Glavna uporabniška skupina	Poklicne uporabe	
Sektor(-ji) uporabe	Poklicne uporabe (SU22) - Gradbeništvo (SU19)	
Kategorije izdelkov	Lepila, tesnilna sredstva (PC1) - Premazi in barve, razredčila, sredstva za odstranjevanje barv (PC9a)	
Scenarij, ki prispeva Okolje		
CS1	ERC8c - ERC8f	
Scenarij, ki prispeva Delojemalec		
CS2 Dejavnosti mešanja - Nanašanje z valjem in čopičem - Nanašanje z valjem, pršenjem in polivanjem - Prenosi materiala	PROC8a - PROC10 - PROC11 - PROC19	
1.2 Pogoji uporabe z vplivom na izpostavitve		
1.2. CS1: Scenarij, ki prispeva Okolje (ERC8c, ERC8f)		
Kategorije sproščanja v okolje	Široko razširjena uporaba, rezultat katere je vključitev v ali na izdelek (notranja) - Široko razširjena uporaba, rezultat katere je vključitev v ali na izdelek (zunanja) (ERC8c, ERC8f)	
Lastnosti izdelka (proizvoda)		
Fizikalna oblika izdelka: Tekoč		
Koncentracija substance v produktu: Obsega koncentracije do 10 %		
Pogoji in meritve v zvezi z obdelavo odpadkov (vključno z odpadki izdelka)		
Ravnanje z odpadki Snov/pripravek in embalažo predati odstranjevalcu nevarnih ali posebnih odpadkov. Sežig nevarnih odpadkov		
Dodaten nasvet iz primerov dobre prakse. Obveznosti v skladu s 4. odstavkom 37. člena Uredbe REACH ne veljajo.		
Dodaten nasvet iz primerov dobre prakse: Preprečite iztekanje in onesnaženje tal/vode zaradi iztekanja.		
1.2. CS2: Scenarij, ki prispeva Delojemalec: Dejavnosti mešanja - Nanašanje z valjem in čopičem - Nanašanje z valjem, pršenjem in polivanjem - Prenosi materiala (PROC8a, PROC10, PROC11, PROC19)		
Kategorije procesov	Prenos snovi ali zmesi (polnjenje in praznjenje) na nenamenskih napravah - Nanašanje z valjčkom ali čopičem - Neindustrijsko brizganje - Ročne dejavnosti, ki vključujejo ročni stik (PROC8a, PROC10, PROC11, PROC19)	
Lastnosti izdelka (proizvoda)		
Fizikalna oblika izdelka: Tekoč		
Koncentracija substance v produktu: Obsega koncentracije do 10 %		
Uporabljena količina, pogostost in trajanje uporabe/izpostavljenost		
Trajanje: Obsega dnevno izpostavljenost do 8 ure		
Frekvenca: Pogostost uporabe 5 dnevi na teden		

Tehnični in organizacijski pogoji in ukrepi

Tehnični in organizacijski ukrepi

Zagotovite osnovno stopnjo splošnega prezračevanja (1 do 3 izmenjav zraka na uro).

Za dodatne podatke glejte 8. odstavek varnostnega lista.

Pogoji in ukrepi glede na osebno zaščito, higieno in preverjanje zdravstvenega stanja

Osebna zaščitna oprema

Nosite primerne rokavice, preizkušene po EN374.

Uporabljajte primerno zaščito oči.

Nosite primeren kombinezon, da bi preprečili izpostavljenost kože.

Nosite ustrezno opremo za zaščito dihal.

Za dodatne podatke glejte 8. odstavek varnostnega lista.

1.3 Ocena izpostavljenosti in sklicevanje na njen vir

N/A

1.4 Smernica za uporabnika, za ugotavljanje, ali dela znotraj omejitev scenarija izpostavitve

Vodilo za preverjanje skladnosti s scenarijem izpostavljenosti:

Če so bili sprejeti dodatni ukrepi za upravljanje s tveganji/pogoji za uporabo, morajo uporabniki zagotoviti vsaj enakovredno raven upravljanja s tveganji.

Safety Data Sheet

Skladno z Uredbo ES št. 1907/2006 (REACH), Člen 31, Priloga II, kot spremenjeno z Uredbo Komisije (EU) št. 2020/878

FACTORY COLORFLOW EP (B)

Date of first edition: 2. 04. 2021

Safety Data Sheet dated 14/09/2026 version 5

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification:

Trade name: FACTORY COLORFLOW EP (B)

Trade code: S100B0316 30

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use: trdilec

Uses advised against: Uporabe, ki niso priporočene

1.3. Details of the supplier of the safety data sheet

Company: KERAKOLL S.p.A.

Via dell'Artigianato, 9

41049 Sassuolo (MODENA) - ITALY

Tel. +39 0536 816511 Fax. +39 0536816581

safety@kerakoll.com

1.4. Emergency telephone number

112 v primeru zastrupitve v sil/ in case of emergency poisoning

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Acute Tox. 4	Harmful if swallowed.
Skin Corr. 1A	Causes severe skin burns and eye damage.
Eye Dam. 1	Causes serious eye damage.
Skin Sens. 1B	May cause an allergic skin reaction.
Aquatic Acute 1	Very toxic to aquatic life.
Aquatic Chronic 1	Very toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Hazard pictograms and Signal Word



Danger

Hazard statements

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P260	Do not breathe vapours.
P273	Avoid release to the environment.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

P501 Dispose of contents/container in accordance with applicable regulations.

Contains

2,2'-iminodietilamin; dietilentriamin

1,3-Cyclohexanedimethanamine

1,2-Ethanediamine, N-(2-aminoethyl)-,
reaction products with glycidyl tolyl ether

Polyoxpropylenediamine

Special provisions according to Annex XVII of REACH and subsequent amendments:

Nobena

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: FACTORY COLORFLOW EP (B)

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
≥ 50 -<70 %	1,2-Ethanediamine, N-(2-aminoethyl)-, reaction products with glycidyl tolyl ether	CAS:84144-79-6 EC:282-199-6	Acute Tox. 4, H302; Skin Corr. 1C, H314; Eye Dam. 1, H318; Skin Sens. 1, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410, M-Chronic:1, M-Acute:1	01-2120762088-49
≥ 10 -<20 %	Polyoxpropylenediamine	CAS:9046-10-0 EC:618-561-0	Skin Corr. 1C, H314; Eye Dam. 1, H318; Aquatic Chronic 3, H412	01-2119557899-12
≥ 10 -<20 %	1,3-Cyclohexanedimethanamine	CAS:2579-20-6 EC:219-941-5	Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Corr. 1A, H314; Eye Dam. 1, H318; Aquatic Chronic 3, H412	01-2119543741-41
≥ 3 -<5 %	Alcohols, C10-16	CAS:67762-41-8 EC:267-019-6	Aquatic Acute 1, H400, M-Acute:1	
≥ 1 -<3 %	p-toluensulfonska kislina (vsebuje največ 5 % H ₂ SO ₄)	CAS:6192-52-5 EC:203-180-0 Index:016-030-00-2	Eye Irrit. 2, H319; STOT SE 3, H335; Skin Irrit. 2, H315 Specific Concentration Limits: C $\geq 20\%$: STOT SE 3 H335	01-2119538811-39
≥ 1 -<3 %	2,2'-iminodietilamin; dietilentriamin	CAS:111-40-0 EC:203-865-4 Index:612-058-00-X	Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 2, H330; Skin Corr. 1B, H314; Eye Dam. 1, H318; STOT SE 3, H335; Skin Sens. 1B, H317 Acute Toxicity Estimate: ATE - Oral: 1.553 mg/kg bw ATE - Dermal: 1.045 mg/kg bw ATE - Inhalation (Dust/mist): 0.07 mg/l	01-2119473793-27
≥ 0.3 -<0.5 %	2,6-di-tert-butyl-p-cresol	CAS:128-37-0 EC:204-881-4	Aquatic Chronic 1, H410; Aquatic Acute 1, H400, M-Acute:1, M-Chronic:1	01-2119555270-46/01-2119565113-46

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Give nothing to eat or drink.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

Eye irritation

Eye damages

Skin Irritation

Erythema

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

For emergency responders:

Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:**7.2. Conditions for safe storage, including any incompatibilities**

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Community Occupational Exposure Limits (OEL)**

2,2',2''-nitrioltriethanol

CAS: 102-71-6	ACGIH	Long Term: 5 mg/m ³ (8h) Notes: Eye and skin irr
	NATION Avstrija AL	Long Term: 5 mg/m ³ - 0.8 ppm; Short Term: 10 mg/m ³ - 1.6 ppm Notes: 15(Miw), 4x, MAK, S, E Source: BGBl. II Nr. 156/2021
	NATION Belgija AL	Long Term: 5 mg/m ³ Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	NATION Češka AL	Long Term: 5 mg/m ³ ; Short Term: Ceiling - 10 mg/m ³ Notes: D, I Source: Nařízení vlády č. 361-2007 Sb
	NATION Nemčija AL	Long Term: 1 mg/m ³ Notes: DFG, Y, E, 1 (I) Source: TRGS 900
	NATION Danska AL	Long Term: 3.1 mg/m ³ - 0.5 ppm Source: BEK nr 2203 af 29/11/2021
	NATION Španija AL	Long Term: 5 mg/m ³ Source: LEP 2022
	NATION Estonija AL	Long Term: 5 mg/m ³ ; Short Term: 10 mg/m ³ Notes: S Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
	NATION Finska AL	Long Term: 5 mg/m ³ Source: HTP-ARVOT 2020
	NATION Irska AL	Long Term: 5 mg/m ³ Source: 2021 Code of Practice
	NATION Litva AL	Long Term: 5 mg/m ³ ; Short Term: 10 mg/m ³ Notes: J Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
	NATION Norveška AL	Long Term: 5 mg/m ³ Source: FOR-2021-06-28-2248
	NATION Švedska AL	Long Term: 5 mg/m ³ - 0.8 ppm; Short Term: 10 mg/m ³ - 1.6 ppm Notes: H, V Source: AFS 2021:3
	SUVA Švicar	Long Term: 5 mg/m ³ ; Short Term: 5 mg/m ³ Notes: TWA mg/m ³ : (i), SSC, VRS Peau Yeux / OAW Haut Auge, NIOSH Source: suva.ch/valeurs-limites

2,2'-iminodietilamin; dietilentriamin

CAS: 111-40-0	ACGIH	Long Term: 1 ppm (8h) Notes: Skin - URT and eye irr
	NATION Avstrija AL	Long Term: 4 mg/m ³ - 1 ppm Notes: MAK, Sh Source: GKV, BGBl. II Nr. 156/2021

NATION AL	Belgija	Long Term: 4.3 mg/m ³ - 1 ppm Notes: D Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
NATION AL	Bolgarija	Long Term: 4 mg/m ³ Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
NATION AL	Češka	Long Term: 4 mg/m ³ ; Short Term: Ceiling - 8 mg/m ³ Notes: I, S Source: Nařízení vlády č. 361-2007 Sb
NATION AL	Danska	Long Term: 4 mg/m ³ - 1 ppm Notes: H Source: BEK nr 2203 af 29/11/2021
NATION AL	Španija	Long Term: 4.3 mg/m ³ - 1 ppm Notes: vía dérmica, Sen Source: LEP 2022
NATION AL	Estonija	Long Term: 4.5 mg/m ³ - 1 ppm; Short Term: 10 mg/m ³ - 2 ppm Notes: A, S Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
NATION AL	Finska	Long Term: 4.3 mg/m ³ - 1 ppm; Short Term: 13 mg/m ³ - 3 ppm Notes: iho Source: HTP-ARVOT 2020
NATION AL	Francija	Long Term: 4 mg/m ³ - 1 ppm Notes: Risques d'allergie cutanée Source: INRS outil65
NATION AL	Grčija	Long Term: 4 mg/m ³ - 1 ppm Notes: Δ Source: ΦΕΚ 94/Α` 13.5.1999
NATION AL	Hrvaška	Long Term: 4.3 mg/m ³ - 1 ppm Notes: alergen koža Source: NN 1/2021
NATION AL	Madžarska	Long Term: 4 mg/m ³ ; Short Term: 8 mg/m ³ Notes: b, m, sz, T Source: 5/2020. (II. 6.) ITM rendelet
NATION AL	Irska	Long Term: 4 mg/m ³ - 1 ppm Notes: Sk Source: 2021 Code of Practice
NATION AL	Litva	Long Term: 4.5 mg/m ³ - 1 ppm; Short Term: 10 mg/m ³ - 2 ppm Notes: J O Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
NATION AL	Norveška	Long Term: 4 mg/m ³ - 1 ppm Notes: H A Source: FOR-2021-06-28-2248
NATION AL	Poljska	Long Term: 4 mg/m ³ ; Short Term: 12 mg/m ³ Notes: skóra Source: Dz.U. 2018 poz. 1286
NATION AL	Romunija	Long Term: 2 mg/m ³ - 0.5 ppm; Short Term: 4 mg/m ³ - 1 ppm Notes: P Source: Republicarea 1 - nr. 743 din 29 iulie 2021
NATION AL	Švedska	Long Term: 4.5 mg/m ³ - 1 ppm; Short Term: 10 mg/m ³ - 2 ppm Notes: H, S, V Source: AFS 2021:3
WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 4.3 mg/m ³ - 1 ppm Notes: Sk Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
SUVA	Švicar	Long Term: 4 mg/m ³ - 1 ppm Notes: R/H, VRS Yeux / OAW Auge, NIOSH Source: suva.ch/valeurs-limites

2,6-di-tert-butyl-p-cresol

CAS: 128-37-0	ACGIH	Long Term: 2 mg/m3 (8h) Notes: IFV, A4 - URT irr
	NATION Avstrija AL	Long Term: 10 mg/m3 Notes: MAK Source: GKV, BGBl. II Nr. 156/2021
	NATION Belgija AL	Long Term: 2 mg/m3 Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	NATION Bolgarija AL	Long Term: 10 mg/m3; Short Term: 50 mg/m3 Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATION Nemčija AL	Long Term: 10 mg/m3 Notes: DFG, Y, 11, E, 4 (II) Source: TRGS 900
	NATION Danska AL	Long Term: 10 mg/m3 Source: BEK nr 2203 af 29/11/2021
	NATION Španija AL	Long Term: 10 mg/m3 Source: LEP 2022
	NATION Finska AL	Long Term: 10 mg/m3; Short Term: 20 mg/m3 Source: HTP-ARVOT 2020
	NATION Francija AL	Long Term: 10 mg/m3 Source: INRS outil65
	NATION Grčija AL	Long Term: 10 mg/m3 Source: ФЕК 94/A` 13.5.1999
	NATION Hrvaška AL	Long Term: 10 mg/m3 Source: NN 1/2021
	NATION Irska AL	Long Term: 2 mg/m3 Source: 2021 Code of Practice
	NATION Slovenija AL	Long Term: 10 mg/m3; Short Term: 40 mg/m3 Notes: Y, (I) Source: UL št. 72, 11. 5. 2021
	WEL- UNITED EH40 KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 10 mg/m3 Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
	SUVA Švicar	Long Term: 10 mg/m3; Short Term: 40 mg/m3 Notes: TWA mg/m3: (i), C1#B, SSC, Foie / Leber, Pas de risque accru de cancer si la VME est respectée. La substance peut être présente sous forme de vapeur et d'aérosol en même temps / Kein erhöhtes Krebsrisiko bei Einhalten des MAK-Werts. Der Stoff kann gleichzeitig als Dampf und Aerosol vorliegen. Source: suva.ch/valeurs-limites

2,2'-iminodietanol; dietanolamin

CAS: 111-42-2	ACGIH	Long Term: 1 mg/m3 (8h) Notes: IFV, Skin, A3 - Liver and kidney dam
	NATION Avstrija AL	Long Term: 2 mg/m3 - 0.46 ppm; Short Term: 4 mg/m3 - 0.92 ppm Notes: 15(Miw), 4x, MAK, H, Sh, Reaktion mit nitro- sierenden Agentien kann zur Bildung des kanzerogenen N- Nitrosodiethanol- amins führen. Source: GKV, BGBl. II Nr. 156/2021
	NATION Belgija AL	Long Term: 1 mg/m3 - 0.2 ppm Notes: D Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	NATION Bolgarija AL	Long Term: 10 mg/m3 Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATION Češka AL	Long Term: 5 mg/m3; Short Term: Ceiling - 10 mg/m3 Notes: I Source: Nařízení vlády č. 361-2007 Sb
	NATION Nemčija AL	Long Term: 0.5 mg/m3 - 0.11 ppm Notes: AGS, H, Sh, Y, 11, 6, 1 (I) Source: TRGS 900

NATION Danska AL	Long Term: 2 mg/m ³ - 0.46 ppm Notes: H Source: BEK nr 2203 af 29/11/2021
NATION Španija AL	Long Term: 1 mg/m ³ - 0.2 ppm Notes: vía dérmica, f, FIV Source: LEP 2022
NATION Estonija AL	Long Term: 5 mg/m ³ - 3 ppm; Short Term: 30 mg/m ³ - 6 ppm Notes: A Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
NATION Finska AL	Long Term: 2 mg/m ³ - 0.46 ppm Notes: iho Source: HTP-ARVOT 2020
NATION Francija AL	Long Term: 15 mg/m ³ - 3 ppm Source: INRS outil65
NATION Grčija AL	Long Term: 15 mg/m ³ - 3 ppm Source: ΦΕΚ 94/A` 13.5.1999
NATION Hrvaška AL	Long Term: 15 mg/m ³ - 3 ppm Notes: koža Source: NN 1/2021
NATION Irska AL	Long Term: 1 mg/m ³ - 0.2 ppm Notes: OEL (8-hour reference period) mg/m ³ : IFV Source: 2021 Code of Practice
NATION Litva AL	Long Term: 15 mg/m ³ - 3 ppm; Short Term: 30 mg/m ³ - 6 ppm Notes: O Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
NATION Norveška AL	Long Term: 15 mg/m ³ - 3 ppm Source: FOR-2021-06-28-2248
NATION Poljska AL	Long Term: 9 mg/m ³ Notes: skóra Source: Dz.U. 2018 poz. 1286
NATION Slovenija AL	Long Term: 0.5 mg/m ³ - 0.11 ppm; Short Term: 0.5 mg/m ³ - 0.11 ppm Notes: K, Y Source: UL št. 72, 11. 5. 2021
NATION Švedska AL	Long Term: 15 mg/m ³ - 3 ppm; Short Term: 30 mg/m ³ - 6 ppm Notes: H, V Source: AFS 2021:3
SUVA Švicar	Long Term: 1 mg/m ³ ; Short Term: 1 mg/m ³ Notes: TWA mg/m ³ : (i), R/H, S, SSC, Rein VRS Foie / Niere OAW Leber, En présence d'agents nitrosants, il peut se former de la N-Nitrosodiéthanamine cancérigène. La substance peut être présente sous forme de vapeur et d'aérosol en même temps. / Reaktion mit nitrosierenden Agentien kann zur Bildung des kanzerogenen N-Nitrosodiethanolamins führen. Der Stoff kann gleichzeitig als Aerosol und Dampf vorliegen. Source: suva.ch/valeurs-limites

Predicted No Effect Concentration (PNEC) values

1,2-Ethanediamine, N-(2-aminoethyl)-, reaction products with glycidyl tolyl ether

CAS: 84144-79-6 Exposure Route: Fresh Water; PNEC Limit: 170 ng/L

Exposure Route: Marine water; PNEC Limit: 17 ng/L

Exposure Route: Mikroorganizmi v čiščenju odpadkov; PNEC Limit: 660 mg/m³

Exposure Route: Freshwater sediments; PNEC Limit: 524 µg/kg

Exposure Route: Usedline morske vode; PNEC Limit: 52.4 mg/kg

Exposure Route: Zemlja; PNEC Limit: 524 µg/kg

Polyoxpropylenediamine

CAS: 9046-10-0 Exposure Route: Fresh Water; PNEC Limit: 15 mg/m³

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 150 mg/m³

Exposure Route: Marine water; PNEC Limit: 14.2 mg/m³

Exposure Route: Mikroorganizmi v čiščenju odpadkov; PNEC Limit: 7.5 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 132 µg/kg

Exposure Route: Usedline morske vode; PNEC Limit: 125 µg/kg

Exposure Route: Zemlja; PNEC Limit: 17.6 µg/kg
Exposure Route: Secondary poisoning; PNEC Limit: 6.93 mg/kg

1,3-Cyclohexanedimethanamine

CAS: 2579-20-6 Exposure Route: Fresh Water; PNEC Limit: 33.1 mg/m³
Exposure Route: Intermittent releases (fresh water); PNEC Limit: 331 mg/m³
Exposure Route: Marine water; PNEC Limit: 3.31 mg/m³
Exposure Route: Mikroorganizmi v čiščenju odplak; PNEC Limit: 10 mg/l

p-toluensulfonska kislina (vsebuje največ 5 % H₂SO₄)

CAS: 6192-52-5 Exposure Route: Fresh Water; PNEC Limit: 73 mg/m³
Exposure Route: Intermittent releases (fresh water); PNEC Limit: 730 mg/m³
Exposure Route: Marine water; PNEC Limit: 1.3 mg/m³
Exposure Route: Mikroorganizmi v čiščenju odplak; PNEC Limit: 58 mg/l
Exposure Route: Freshwater sediments; PNEC Limit: 57.7 µg/kg
Exposure Route: Usedline morske vode; PNEC Limit: 5.77 µg/kg
Exposure Route: Zemlja; PNEC Limit: 16 µg/kg

2,2'-iminodietilamin; dietilentriamin

CAS: 111-40-0 Exposure Route: Fresh Water; PNEC Limit: 560 mg/m³
Exposure Route: Intermittent releases (fresh water); PNEC Limit: 320 mg/m³
Exposure Route: Marine water; PNEC Limit: 56 mg/m³
Exposure Route: Mikroorganizmi v čiščenju odplak; PNEC Limit: 6 mg/l
Exposure Route: Freshwater sediments; PNEC Limit: 1072 mg/kg
Exposure Route: Usedline morske vode; PNEC Limit: 107.2 mg/kg
Exposure Route: Zemlja; PNEC Limit: 7.97 mg/kg

2,6-di-tert-butyl-p-cresol

CAS: 128-37-0 Exposure Route: Fresh Water; PNEC Limit: 199 ng/L
Exposure Route: Intermittent releases (fresh water); PNEC Limit: 1.99 mg/m³
Exposure Route: Marine water; PNEC Limit: 19.9 ng/L
Exposure Route: Mikroorganizmi v čiščenju odplak; PNEC Limit: 170 mg/m³
Exposure Route: Freshwater sediments; PNEC Limit: 99.6 µg/kg
Exposure Route: Usedline morske vode; PNEC Limit: 9.96 µg/kg
Exposure Route: Zemlja; PNEC Limit: 47.69 µg/kg
Exposure Route: Secondary poisoning; PNEC Limit: 8.33 mg/kg

Derived No Effect Level (DNEL) values

1,2-Ethanediamine, N-(2-aminoethyl)-, reaction products with glycidyl tolyl ether

CAS: 84144-79-6 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 2.35 mg/kg/day

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 666 µg/kg

Polyoxpropylenediamine

CAS: 9046-10-0 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 1.36 mg/kg/day

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 2.5 mg/kg

1,3-Cyclohexanedimethanamine

CAS: 2579-20-6 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Professional: 9.47 µg/m³

p-toluensulfonska kislina (vsebuje največ 5 % H₂SO₄)

CAS: 6192-52-5 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 53.6 mg/kg/day; Consumer: 8.7 mg/kg/day

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 7.6 mg/kg; Consumer: 2.5 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 2.5 mg/kg

2,2'-iminodietilamin; dietilentriamin

CAS: 111-40-0 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 15.4 mg/kg/day; Consumer: 4.6 mg/kg/day

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
Worker Professional: 91.1 mg/kg/day; Consumer: 25.5 mg/kg/day

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Professional: 870 µg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Worker Professional: 2.6 mg/kg/day

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 11.4 mg/kg; Consumer: 4.88 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Long Term, local effects
Worker Professional: 1.1 mg/cm²

2,6-di-tert-butyl-p-cresol

CAS: 128-37-0 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 4.4 mg/kg/day; Consumer: 780 µg/m³

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 4.7 mg/kg; Consumer: 1.7 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 0.25 mg/kg

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use contact lenses.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Gloves characteristics:

Appropriate gloves thickness and breakthrough time may differ depending on the specific use conditions. Make sure to use protective gloves adequate to the conditions of use.

CEN standard(s) information:

Suitable protective gloves must comply with the appropriate EN 374 standard(s)

Respiratory protection:

Use adequate protective respiratory equipment.

Thermal Hazards:

Ni predvideno, če se uporablja, kot je predvideno

Environmental exposure controls:

Ne dovolite, da izdelek pride v kanalizacijo ali v površinske ali podzemne vode.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	yellow
Odour:	like: Ammonia
Odour threshold:	Not Relevant Notes: Podatek ni na voljo
pH:	=11.00
Kinematic viscosity:	Not Relevant Notes: Ni določeno, ker ni potrebno za CLP-razvrstitev
Melting point/freezing point:	N.A.
Boiling point or initial boiling point and boiling range:	N.A.

Flash point:	> 100°C / 212°F
Lower and upper explosion limit:	Not Relevant Notes: Se ne uporablja, ker zmes ni vnetljiva
Relative vapour density:	N.A.
Vapour pressure:	N.A.
Density and/or relative density:	1.02 g/cm ³
Solubility in water:	N.A.
Solubility in oil:	Not Relevant Notes: Ni določeno, ker ni potrebno za CLP-razvrstitev
Partition coefficient n-octanol/water (log value):	Not Relevant Notes: Se ne uporablja, ker zmes ni vnetljiva
Auto-ignition temperature:	Not Relevant Notes: Se ne uporablja, ker zmes ni vnetljiva
Decomposition temperature:	Not Relevant Notes: Ni uporabljivo, ker zmes ni samoreaktivna
Flammability:	N.A.
Volatile Organic compounds - VOCs =	2.54%; 25.92g/L
Particle characteristics:	
Particle size:	N.A.

9.2. Other information

Explosive properties:	Not Relevant Notes: Ni uporabljivo, zmes ne vsebuje eksplozivnih skupin
No other relevant information	

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Data not available.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological Information of the Preparation

a) acute toxicity	The product is classified: Acute Tox. 4(H302)
b) skin corrosion/irritation	The product is classified: Skin Corr. 1A(H314) Skin Corrosive
c) serious eye damage/irritation	The product is classified: Eye Dam. 1(H318)
d) respiratory or skin sensitisation	The product is classified: Skin Sens. 1B(H317)
e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified Based on available data, the classification criteria are not met

g) reproductive toxicity	Not classified Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

1,2-Ethanediamine, N-(2-aminoethyl)-, reaction products with glycidyl tolyl ether

CAS: 84144-79-6 a) acute toxicity LD50 Oral Rat < 301 mg/kg

Polyoxpropylenediamine

CAS: 9046-10-0 a) acute toxicity LD50 Oral Rat = 2885 mg/kg
LC50 Inhalation Vapour Rat > 0.74 mg/l 8h
LD50 Skin Rabbit = 2980 mg/kg 24h
b) skin corrosion/irritation Skin Corrosive Rabbit Positive 4h
c) serious eye damage/irritation Eye Corrosive Rabbit Positive
f) carcinogenicity Genotoxicity Negative
g) reproductive toxicity No Observed Adverse Effect Level Skin Rat = 30 mg/kg

1,3-Cyclohexanedimethanamine

CAS: 2579-20-6 a) acute toxicity LD50 Oral Rat > 300 mg/kg
LD50 Skin Rabbit = 1700 mg/kg 24h
b) skin corrosion/irritation Skin Corrosive Rabbit Positive
d) respiratory or skin sensitisation Skin Sensitization Guinea pig Negative
f) carcinogenicity Genotoxicity Negative
g) reproductive toxicity No Observed Effect Level Oral Rat = 300 mg/kg

p-toluensulfonska kislina (vsebuje največ 5 % H₂SO₄)

CAS: 6192-52-5 a) acute toxicity LD50 Oral Rat ≥ 1104 mg/kg
LC50 Inhalation Vapour Rat ≥ 50 mg/l 8h
LD50 Skin Rabbit > 2000 mg/kg
b) skin corrosion/irritation Skin Corrosive Rabbit Positive 4h
c) serious eye damage/irritation Eye Corrosive Rabbit Positive
d) respiratory or skin sensitisation Skin Sensitization Guinea pig Negative
f) carcinogenicity Genotoxicity Negative
Carcinogenicity Negative
g) reproductive toxicity No Observed Adverse Effect Level Oral Rat = 1000 mg/kg

2,2'-iminodietilamin; dietilentriamin

CAS: 111-40-0 a) acute toxicity ATE - Oral: 1.553 mg/kg bw
ATE - Dermal: 1.045 mg/kg bw
ATE - Inhalation (Dust/mist): 0.07 mg/l
LD50 Oral Rat = 1.62 ml/kg
LC50 Inhalation Dust Rat = 0.07 mg/l 4h
LD50 Skin Rabbit = 1.09 ml/kg
b) skin corrosion/irritation Skin Corrosive Rabbit Positive
c) serious eye damage/irritation Eye Corrosive Rabbit Positive
d) respiratory or skin sensitisation Skin Sensitization Positive

		Respiratory Sensitization Negative
f) carcinogenicity		Genotoxicity Negative
		Carcinogenicity Skin Negative
g) reproductive toxicity		No Observed Adverse Effect Level Oral Rat = 30 mg/kg
2,6-di-tert-butyl-p-cresol		
CAS: 128-37-0	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg 24h
		LD50 Skin Rat > 2000 mg/kg 24h
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative 4h
	c) serious eye damage/irritation	Eye Irritant Rabbit No
f) carcinogenicity		Genotoxicity Negative
		Carcinogenicity Negative
g) reproductive toxicity		Reproductive Toxicity Oral Rat = 100 mg/kg

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

Very toxic to aquatic organisms.

Very toxic to aquatic life with long lasting effects.

List of Eco-Toxicological properties of the product

The product is classified: Aquatic Acute 1(H400), Aquatic Chronic 1(H410)

List of Eco-Toxicological properties of the components

1,2-Ethanediamine, N-(2-aminoethyl)-, reaction products with glycidyl tolyl ether

- CAS: 84144-79-6
- a) Aquatic acute toxicity: LC50 Fish = 660 µg/L 96h
 - a) Aquatic acute toxicity: LC50 Daphnia = 14 mg/L 24h
 - a) Aquatic acute toxicity: EC50 Algae = 0.17 mg/L 72h
 - a) Aquatic acute toxicity: EC50 Sludge = 66 mg/L 3h

Polyoxpropylenediamine

- CAS: 9046-10-0
- a) Aquatic acute toxicity: LC50 Fish Oncorhynchus mykiss > 15 mg/L 96h
 - a) Aquatic acute toxicity: LC50 Daphnia Daphnia magna = 80 mg/L 48h
 - a) Aquatic acute toxicity: EC50 Algae Pseudokirchneriella subcapitata = 15 mg/L 72h
 - a) Aquatic acute toxicity: NOEC Algae Pseudokirchneriella subcapitata = 1.4 mg/L 72h
 - a) Aquatic acute toxicity: EC50 Sludge Activated Sludge = 750 mg/L 3h
 - a) Aquatic acute toxicity: NOEC Sludge Activated Sludge = 310 mg/L 3h

1,3-Cyclohexanedimethanamine

- CAS: 2579-20-6
- a) Aquatic acute toxicity: LC50 Fish Golden orfe = 130 mg/L 96h
 - a) Aquatic acute toxicity: LC50 Daphnia Daphnia magna = 33.1 mg/L 48h
 - a) Aquatic acute toxicity: EC50 Algae Pseudokirchneriella subcapitata = 56.7 mg/L 72h
 - a) Aquatic acute toxicity: EC50 microorganisms > 1000 mg/L

p-toluensulfonska kislina (vsebuje največ 5 % H₂SO₄)

- CAS: 6192-52-5
- a) Aquatic acute toxicity: LC50 Fish Goldorfen = 325 mg/L 96h
 - a) Aquatic acute toxicity: LC50 Daphnia Daphnia Magna = 100 mg/L 48h
 - a) Aquatic acute toxicity: NOEC Algae Selenastrum capricornutum = 44.8 mg/L 72h
 - a) Aquatic acute toxicity: NOEC Sludge activated sludge = 580 mg/L 3h

2,2'-iminodietilamin; dietilentriamin

- CAS: 111-40-0
- a) Aquatic acute toxicity: LC50 Fish Poecilia reticulata = 430 mg/L 96h
 - b) Aquatic chronic toxicity: NOEC Fish Gasterosteus aculeatus = 10 mg/L
 - a) Aquatic acute toxicity: LC50 Daphnia Daphnia magna = 32 mg/L 48h
 - b) Aquatic chronic toxicity: NOEC Daphnia Daphnia magna = 5.6 mg/L

- a) Aquatic acute toxicity: EC50 Algae *Pseudokirchnerella subcapitata* = 1164 mg/L 72h
- c) Bacteria toxicity: EC50 nitrifying bacteria = 32.7 mg/L
- d) Terrestrial toxicity: LC50 Worm = 797 mg/kg

2,6-di-tert-butyl-p-cresol

- CAS: 128-37-0
- a) Aquatic acute toxicity: LC50 Fish *Danio rerio* > 0.57 mg/L 96h
 - b) Aquatic chronic toxicity: EC10 Fish *Oryzias latipes* = 0.053 mg/L
 - a) Aquatic acute toxicity: EC50 *Daphnia magna* = 0.48 mg/L 48h
 - a) Aquatic acute toxicity: EC50 Algae > 0.4 mg/L 72h
 - c) Bacteria toxicity: EC50 *Tetrahymena pyriformis* = 1.7 mg/L

12.2. Persistence and degradability

Polyoxpropylenediamine

CAS: 9046-10-0 Non-readily biodegradable Test: CO2 production; Value: 9.8
Notes: %; OECD Guideline 301B

1,3-Cyclohexanedimethanamine

CAS: 2579-20-6 Non-readily biodegradable Test: CO2 production
Notes: OECD Guideline No 301 B.

p-toluensulfonska kislina (vsebuje največ 5 % H2SO4)

CAS: 6192-52-5 Readily biodegradable Test: CO2 production

2,2'-iminodietilamin; dietilentriamin

CAS: 111-40-0 Readily biodegradable Value: 87
Notes: 21days

2,6-di-tert-butyl-p-cresol

CAS: 128-37-0 Non-readily biodegradable Test: Biochemical oxygen demand; Value: 4.5
Notes: OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))

12.3. Bioaccumulative potential

p-toluensulfonska kislina (vsebuje največ 5 % H2SO4)

CAS: 6192-52-5 Not bioaccumulative

2,2'-iminodietilamin; dietilentriamin

CAS: 111-40-0 Bioaccumulative Test: BCF - Bioconcentration factor; Value: 6.3

2,6-di-tert-butyl-p-cresol

CAS: 128-37-0 Bioaccumulative Test: BCF - Bioconcentration factor; Value: 598.4
Notes: L/kg ww

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

Ni sestavine PBT/vPvB.

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7. Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Če je mogoče, predelajte. Pošljite v usposobljena odlagališča ali v zažig pod kontroliranimi pogoji. Ravajte se po lokalnih in državnih normah. Odstranjevanje z izpustom v odpadne vode ni dovoljeno

Odstranjeni izdelek mora biti v skladu z Uredbo (EU) 1357/2014 razvrščen kot nevaren odpad

Šifre odpadkov v skladu z Evropski seznam odpadkov (ESO) ni mogoče določiti zaradi odvisnosti od uporabe. Obrnite se na pooblaščen službo za odstranjevanje odpadkov.

Properties of waste which render it hazardous (Annex III, Directive 2008/98/EC):

N.A.

SECTION 14: Transport information

14.1. UN number or ID number

2735

14.2. UN proper shipping name

ADR-Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (1,2-Ethanediamine, N-(2-aminoethyl)-, reaction products with glycidyl tolyl ether - Polyoxpropylenediamine)

IATA-Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (1,2-Ethanediamine, N-(2-aminoethyl)-, reaction products with glycidyl tolyl ether - Polyoxpropylenediamine)

IMDG-Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (1,2-Ethanediamine, N-(2-aminoethyl)-, reaction products with glycidyl tolyl ether - Polyoxpropylenediamine)

14.3. Transport hazard class(es)

ADR-Class: 8

IATA-Class: 8

IMDG-Class: 8

14.4. Packing group

ADR-Packing Group: II

IATA-Packing group: II

IMDG-Packing group: II

14.5. Environmental hazards

Most important toxic component: 1,2-Ethanediamine, N-(2-aminoethyl)-, reaction products with glycidyl tolyl ether

Marine pollutant: Yes

Environmental Pollutant: Yes

IMDG-EMS: F-A, S-B

14.6. Special precautions for user

Road and Rail (ADR-RID):

ADR-Label: 8

ADR - Hazard identification number: 80

ADR-Special Provisions: 274

ADR-Transport category (Tunnel restriction code): 2 (E)

ADR Limited Quantities: 1 L

ADR Excepted Quantities: E2

Air (IATA):

IATA-Passenger Aircraft: 851

IATA-Cargo Aircraft: 855

IATA-Label: 8

IATA-Subsidiary hazards: -

IATA-Erg: 8L

IATA-Special Provisions: A3 A803

Sea (IMDG):

IMDG-Stowage and handling: Category A

IMDG-Segregation: SG35 SGG18

IMDG-Subsidiary hazards: -

IMDG-Special Provisions: 274

14.7. Maritime transport in bulk according to IMO instruments

N.A.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EU) n. 2020/878

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/849 (ATP 17 CLP)

Regulation (EU) n. 2022/692 (ATP 18 CLP)
Regulation (EU) n. 2023/1434 (ATP 19 CLP)
Regulation (EU) n. 2024/197 (ATP 21 CLP)
Regulation (EU) n. 2024/2865
Regulation (EC) nr 648/2004 (Detergents).

Regulation (EU) n. 2023/707
Regulation (EU) n. 2023/1435 (ATP 20 CLP)
Regulation (EU) n. 2024/2564 (ATP 22 CLP)
Regulation (EU) n. 2025/1222 (ATP 23 CLP)

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

Restrictions related to the product: 3
Restrictions related to the substances contained: 75

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1	Lower-tier threshold (tonnes)	Upper-tier threshold (tonnes)
Product belongs to category: E1	100	200

Explosives precursors – Regulation 2019/1148

No substances listed

Regulation (EU) No 649/2012 (PIC regulation)

No substances listed

German Water Hazard Class.

Razred 2: ogroža vodo.

German Lagerklasse according to TRGS 510:

LGK 8A

SVHC Substances:

No SVHC substances present in concentration >= 0.1%

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

Substances for which a Chemical Safety Assessment has been carried out:

Polyoxpropylenediamine

1,3-Cyclohexanedimethanamine

2,6-di-tert-butyl-p-cresol

SECTION 16: Other information

Code	Description
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
3.1/2/Inhal	Acute Tox. 2	Acute toxicity (inhalation), Category 2
3.1/4/Dermal	Acute Tox. 4	Acute toxicity (dermal), Category 4
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.2/1A	Skin Corr. 1A	Skin corrosion, Category 1A
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
3.2/1C	Skin Corr. 1C	Skin corrosion, Category 1C
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.3/2	Eye Irrit. 2	Eye irritation, Category 2

3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.4.2/1B	Skin Sens. 1B	Skin Sensitisation, Category 1B
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
4.1/A1	Aquatic Acute 1	Acute aquatic hazard, category 1
4.1/C1	Aquatic Chronic 1	Chronic (long term) aquatic hazard, category 1
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
--	---------------------------------

Acute Tox. 4, H302	Calculation method
Skin Corr. 1A, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1B, H317	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

IC50: half maximal inhibitory concentration

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KAFH: Keep Away From Heat
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- Safety Data Sheet
- SECTION 1: Identification of the substance/mixture and of the company/undertaking
- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 7: Handling and storage
- SECTION 8: Exposure controls/personal protection
- SECTION 9: Physical and chemical properties
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 13: Disposal considerations
- SECTION 14: Transport information
- SECTION 15: Regulatory information
- SECTION 16: Other information

Scenarij izpostavljenosti

2,6-di-tert-butyl-p-cresol

Scenarij izpostavljenosti, 25/06/2021

Identiteta snovi	
	2,6-di-tert-butyl-p-cresol
št.CAS	128-37-0
št.EINECS	204-881-4
Registracijska številka	01-2119555270-46/01-2119565113-46

Kazalo

1. **ES 1** Široko razširjena uporaba, ki jo izvajajo poklicni delavci; Razni produkti (PC9a, PC1)

1. ES 1

Široko razširjena uporaba, ki jo izvajajo poklicni delavci; Razni produkti (PC9a, PC1)

1.1 NASLOVNI ODSTAVEK

Ime scenarija izpostavljenosti	Gospodarska uporaba premazov in barv
Datum - revizija	25/06/2021 - 1.0
Stopnja življenjskega cikla	Široko razširjena uporaba, ki jo izvajajo poklicni delavci
Glavna uporabniška skupina	Poklicne uporabe
Sektor(-ji) uporabe	Poklicne uporabe (SU22)
Kategorije izdelkov	Premazi in barve, razredčila, sredstva za odstranjevanje barv (PC9a) - Lepila, tesnilna sredstva (PC1)

Scenarij, ki prispeva Okolje

CS1	ERC8c - ERC8f
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1.2 Pogoji uporabe z vplivom na izpostavitve

1.2. CS1: Scenarij, ki prispeva Okolje (ERC8c, ERC8f)

Kategorije sproščanja v okolje	Široko razširjena uporaba, rezultat katere je vključen v ali na izdelek (notranja) - Široko razširjena uporaba, rezultat katere je vključen v ali na izdelek (zunanja) (ERC8c, ERC8f)
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Uporabljena količina, pogostost in trajanje uporabe/(ali amortizacijska doba)

Uporabljene količine:

Letna vsota na lokacijo <= 27.5 ton/letno

Pogoji in ukrepi v zvezi s komunalnimi čistilnimi napravami

Vrsta čistilne naprave (STP):

Domača čistilna naprava

STP odpadne vode (m³/dan): 2000

Pogoji in meritve v zvezi z obdelavo odpadkov (vključno z odpadki izdelka)

Ravnanje z odpadki

Sežig nevarnih odpadkov

Posebni ukrepi niso bili ugotovljeni.

Drugi pogoji uporabe, ki vplivajo na izpostavljenost okolja

Krajevni faktor razredčenja morske vode:: 100

Krajevni faktor razredčenja sladke vode: 10

Pretok sprejemnih površinskih voda: 18000 m³/dan

Dodaten nasvet iz primerov dobre prakse. Obveznosti v skladu s 4. odstavkom 37. člena Uredbe REACH ne veljajo.

Dodaten nasvet iz primerov dobre prakse:

Zagotovite redno preverjanje in vzdrževanje nadzornih ukrepov.

1.3 Ocena izpostavljenosti in sklicevanje na njen vir

1.3. CS1: Scenarij, ki prispeva Okolje (ERC8c, ERC8f)

cilj zaščite	Stopnja izpostavljenosti	Metoda izračuna	Stopnja opredelitve tveganja (RCR)
N/A	N/A	ECETOC TRA environment v3	< 1

1.4 Smernica za uporabnika, za ugotavljanje, ali dela znotraj omejitev scenarija izpostavitve

Vodilo za preverjanje skladnosti s scenarijem izpostavljenosti:

Če so bili sprejeti dodatni ukrepi za upravljanje s tveganji/pogoji za uporabo, morajo uporabniki zagotoviti vsaj enakovredno raven upravljanja s tveganji.

Scenarij izpostavljenosti

1,3-Cyclohexanedimethanamine

Scenarij izpostavljenosti, 29/12/2021

Identiteta snovi	
	1,3-Cyclohexanedimethanamine
št.CAS	2579-20-6
št.EINECS	219-941-5
Registracijska številka	01-2119543741-41

Kazalo

1. **ES 1** Široko razširjena uporaba, ki jo izvajajo poklicni delavci

1. ES 1 Široko razširjena uporaba, ki jo izvajajo poklicni delavci	
1.1 NASLOVNI ODSTAVEK	
Ime scenarija izpostavljenosti	Gospodarska uporaba premazov in barv
Datum - revizija	29/12/2021 - 1.0
Stopnja življenjskega cikla	Široko razširjena uporaba, ki jo izvajajo poklicni delavci
Glavna uporabniška skupina	Poklicne uporabe
Sektor(-ji) uporabe	Poklicne uporabe (SU22)
Scenarij, ki prispeva Okolje	
CS1 Mokro oblikovanje	ERC8a - ERC8c
Scenarij, ki prispeva Delojemalec	
CS2 Nanašanje z valjem in čopičem - Prenosi materiala	PROC8a - PROC10
1.2 Pogoji uporabe z vplivom na izpostavitve	
1.2. CS1: Scenarij, ki prispeva Okolje: Mokro oblikovanje (ERC8a, ERC8c)	
Kategorije sproščanja v okolje	Široko razširjena uporaba nereaktivnega procesnega pripomočka (brez vključitve v ali na izdelek, notranja) - Široko razširjena uporaba, rezultat katere je vključitev v ali na izdelek (notranja) (ERC8a, ERC8c)
Lastnosti izdelka (proizvoda)	
Fizikalna oblika izdelka: Tekoč	
Parni tlak: 34 Pa	
Tehnični in organizacijski pogoji in ukrepi	
Kontrolni ukrepi za preprečevanje izpustov Posebni ukrepi niso bili ugotovljeni.	
Pogoji in ukrepi v zvezi s komunalnimi čistilnimi napravami	
Vrsta čistilne naprave (STP): Posebni ukrepi niso bili ugotovljeni.	
Pogoji in meritve v zvezi z obdelavo odpadkov (vključno z odpadki izdelka)	
Ravnanje z odpadki Ta izdelek in njegovo embalažo morate odstraniti kot nevarno. Snov/pripravek in embalažo predati odstranjevalcu nevarnih ali posebnih odpadkov. Posode in kontejnerje za odpadke odstranite v skladu z lokalnimi predpisi.	
1.2. CS2: Scenarij, ki prispeva Delojemalec: Nanašanje z valjem in čopičem - Prenosi materiala (PROC8a, PROC10)	
Kategorije procesov	Prenos snovi ali zmesi (polnjenje in praznjenje) na nenamenskih napravah - Nanašanje z valjčkom ali čopičem (PROC8a, PROC10)
Lastnosti izdelka (proizvoda)	
Fizikalna oblika izdelka: Tekoč	
Parni tlak: 34 Pa	
Koncentracija substance v produktu: Obsega delež snovi v izdelku do 25 %.	
Uporabljena količina, pogostost in trajanje uporabe/izpostavljenost	
Trajanje:	

Obsega dnevno izpostavljenost do 8 ure

Tehnični in organizacijski pogoji in ukrepi

Tehnični in organizacijski ukrepi

Zagotovite, da so upravljavci usposobljeni za zmanjšanje izpostavljenosti na minimum.
Lokalno odsesavanje

Pogoji in ukrepi glede na osebno zaščito, higieno in preverjanje zdravstvenega stanja

Osebna zaščitna oprema

Nosite primerne rokavice, preizkušene po EN374.
Uporabljajte ustrezno zaščito za obraz.
Pri posebnem usposabljanju nosite kemično odporne rokavice (preizkušene po EN374).
Uporabljajte primerno zaščito oči.
Nosite primeren kombinezon, da bi preprečili izpostavljenost kože.
Nosite ustrezno opremo za zaščito dihal.

Drugi pogoji uporabe, ki vplivajo na izpostavljenost delojemalcev

Notranja aplikacija
Gospodarska uporaba

Izpostavljeni deli telesa:

Predpostavlja se, da je morebiten stik s kožo omejen na roke.

Dodaten nasvet iz primerov dobre prakse. Obveznosti v skladu s 4. odstavkom 37. člena Uredbe REACH ne veljajo.

Dodaten nasvet iz primerov dobre prakse:

Razlito takoj odstranite.

1.3 Ocena izpostavljenosti in sklicevanje na njen vir

1.3. CS1: Scenarij, ki prispeva Okolje: Mokro oblikovanje (ERC8a, ERC8c)

Dodatne informacije glede ocene izpostavljenosti:

Ker ni bila ugotovljena nobena nevarnost za okolje, ni bila opravljena ocena izpostavljenosti in opis tveganja, ki bi se nanašala na okolje.

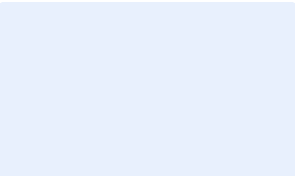
1.3. CS2: Scenarij, ki prispeva Delojemalec: Nanašanje z valjem in čopičem - Prenosi materiala (PROC8a, PROC10)

Pot izpostavljenosti, Učinki na zdravje, Indikatorji izpostavljenosti	Stopnja izpostavljenosti	Metoda izračuna	Stopnja opredelitve tveganja (RCR)
inhalacijski, sistemsko, kratkoročno	N/A	ECETOC TRA Delojemalec v2.0	0.992
stik s kožo, sistemsko, kratkoročno	N/A	ECETOC TRA Delojemalec v2.0	0.005
kombinirane poti, sistemsko, kratkoročno	N/A	ECETOC TRA Delojemalec v2.0	0.998

1.4 Smernica za uporabnika, za ugotavljanje, ali dela znotraj omejitev scenarija izpostavitve

Vodilo za preverjanje skladnosti s scenarijem izpostavljenosti:

Če so bili sprejeti dodatni ukrepi za upravljanje s tveganji/pogoji za uporabo, morajo uporabniki zagotoviti vsaj enakovredno raven upravljanja s tveganji.



Scenarij izpostavljenosti

Polyoxpropylenediamine

Scenarij izpostavljenosti, 17/06/2021

Identiteta snovi	
	Polyoxpropylenediamine
št.CAS	9046-10-0
št.EINECS	618-561-0
Registracijska številka	01-2119557899-12

Kazalo

1. **ES 1** Široko razširjena uporaba, ki jo izvajajo poklicni delavci; Razni produkti (PC9b, PC32)

1. ES 1		Široko razširjena uporaba, ki jo izvajajo poklicni delavci; Razni produkti (PC9b, PC32)	
1.1 NASLOVNI ODSTAVEK			
Ime scenarija izpostavljenosti	Uporaba pri premazih - Uporaba za trde penaste mase, premaze, lepila in tesnila - Sredstvo za impregniranje proti vlagi		
Datum - revizija	17/06/2021 - 1.0		
Stopnja življenjskega cikla	Široko razširjena uporaba, ki jo izvajajo poklicni delavci		
Glavna uporabniška skupina	Poklicne uporabe		
Sektor(-ji) uporabe	Poklicne uporabe (SU22)		
Kategorije izdelkov	Polnila, kiti, mavci, modelirna glina (PC9b) - Polimerni pripravki in spojine (PC32)		
Scenarij, ki prispeva Okolje			
CS1	ERC8c		
Scenarij, ki prispeva Delojemalec			
CS2 Nanašanje z valjem in čopičem	PROC10		
CS3 Dejavnosti mešanja - Ročno	PROC19		
1.2 Pogoji uporabe z vplivom na izpostavitve			
1.2. CS1: Scenarij, ki prispeva Okolje (ERC8c)			
Kategorije sproščanja v okolje	Široko razširjena uporaba, rezultat katere je vključen v ali na izdelek (notranja) (ERC8c)		
Lastnosti izdelka (proizvoda)			
Fizikalna oblika izdelka: Tekoč			
Parni tlak: = 90 Pa			
Koncentracija substance v produktu: Obsega delež snovi v izdelku do 25 %.			
Uporabljena količina, pogostost in trajanje uporabe/(ali amortizacijska doba)			
Dnevi emisij: 365 dnevi na leto			
Tehnični in organizacijski pogoji in ukrepi			
Kontrolni ukrepi za preprečevanje izpustov			
Uporabljena čistilna naprava.		Voda - najmanjša učinkovitost: = 1.5 %	
Pogoji in ukrepi v zvezi s komunalnimi čistilnimi napravami			
Vrsta čistilne naprave (STP): Komunalna STP čistilna naprava			
STP odpadne vode (m3/dan): 2000			
Drugi pogoji uporabe, ki vplivajo na izpostavljenost okolja			
Krajevni faktor razredčenja morske vode:: 100 Krajevni faktor razredčenja sladke vode: 10 Pretok sprejemnih površinskih voda: 18000 m3/dan Notranja aplikacija			
1.2. CS2: Scenarij, ki prispeva Delojemalec: Nanašanje z valjem in čopičem (PROC10)			

Kategorije procesov	Nanašanje z valjčkom ali čopičem (PROC10)	
Lastnosti izdelka (proizvoda)		
Fizikalna oblika izdelka: Tekoč		
Parni tlak: = 90 Pa		
Koncentracija substance v produktu: Obsega delež snovi v izdelku do 25 %.		
Uporabljena količina, pogostost in trajanje uporabe/izpostavljenost		
Trajanje: Obsega uporabo do = 480 min		
Frekvenca: Obsega uporabo do = 5 dnevi na teden		
Tehnični in organizacijski pogoji in ukrepi		
Tehnični in organizacijski ukrepi Nadzorujte pravilen prenos razpoložljivih ukrepov za obvladovanje tveganj in upoštevanje pogojev delovanja. Preprečite neposreden stik z očmi, tudi z umazanimi rokami.		
Pogoji in ukrepi glede na osebno zaščito, higieno in preverjanje zdravstvenega stanja		
Osebna zaščitna oprema		
Pri osnovnem usposabljanju uslužbencev nosite kemično odporne rokavice (preizkušene po EN374). Nosite zaščito dihal, če je njena uporaba predpisana z določenimi sodelujočimi scenariji. Nosite ustrezno opremo za zaščito dihal. Uporabljajte ustrezno zaščito za obraz.		Kožni - najmanjša učinkovitost: = 90 %
Drugi pogoji uporabe, ki vplivajo na izpostavljenost delojemalcev		
Notranja aplikacija Gospodarska uporaba Temperatura: Predpostavljena je uporaba pri temperaturah ki ne presegajo temperaturo okolice za več kot 20 °C.		
1.2. CS3: Scenarij, ki prispeva Delojemalec: Dejavnosti mešanja - Ročno (PROC19)		
Kategorije procesov	Ročne dejavnosti, ki vključujejo ročni stik (PROC19)	
Lastnosti izdelka (proizvoda)		
Fizikalna oblika izdelka: Tekoč		
Parni tlak: = 90 Pa		
Koncentracija substance v produktu: Obsega delež snovi v izdelku do 25 %.		
Uporabljena količina, pogostost in trajanje uporabe/izpostavljenost		
Trajanje: Obsega uporabo do = 240 min		
Frekvenca: Obsega uporabo do = 5 dnevi na teden		
Tehnični in organizacijski pogoji in ukrepi		
Tehnični in organizacijski ukrepi Nadzorujte pravilen prenos razpoložljivih ukrepov za obvladovanje tveganj in upoštevanje pogojev delovanja. Preprečite neposreden stik z očmi, tudi z umazanimi rokami.		
Pogoji in ukrepi glede na osebno zaščito, higieno in preverjanje zdravstvenega stanja		

Osebna zaščitna oprema

Pri osnovnem usposabljanju uslužbencev nosite kemično odporne rokavice (preizkušene po EN374).
Nosite zaščito dihal, če je njena uporaba predpisana z določenimi sodelujočimi scenariji.
Nosite ustrezno opremo za zaščito dihal.
Uporabljajte ustrezno zaščito za obraz.

Kožni - najmanjša učinkovitost: = 95 %

Drugi pogoji uporabe, ki vplivajo na izpostavljenost delojemalcev

Notranja aplikacija
Gospodarska uporaba

Temperatura: Predpostavljena je uporaba pri temperaturah ki ne presegajo temperaturo okolice za več kot 20 °C.

1.3 Ocena izpostavljenosti in sklicevanje na njen vir

1.3. CS2: Scenarij, ki prispeva Delojemalec: Nanašanje z valjem in čopičem (PROC10)

Pot izpostavljenosti, Učinki na zdravje, Indikatorji izpostavljenosti	Stopnja izpostavljenosti	Metoda izračuna	Stopnja opredelitve tveganja (RCR)
stik s kožo, sistemsko, dolgoročno	= 0.6857 mg/kg bw/dan	ECETOC TRA delojemalec v3	= 0.274286

1.3. CS3: Scenarij, ki prispeva Delojemalec: Dejavnosti mešanja - Ročno (PROC19)

Pot izpostavljenosti, Učinki na zdravje, Indikatorji izpostavljenosti	Stopnja izpostavljenosti	Metoda izračuna	Stopnja opredelitve tveganja (RCR)
stik s kožo, sistemsko, dolgoročno	= 1.7697 mg/kg bw/dan	ECETOC TRA delojemalec v3	= 0.707143

1.4 Smernica za uporabnika, za ugotavljanje, ali dela znotraj omejitev scenarija izpostavitve

Vodilo za preverjanje skladnosti s scenarijem izpostavljenosti:

Če so bili sprejeti dodatni ukrepi za upravljanje s tveganji/pogoji za uporabo, morajo uporabniki zagotoviti vsaj enakovredno raven upravljanja s tveganji.