

TECHNOSEAL

Creation date 13. November 2018
Revision date Version 1.1

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

- 1.1. Product identifier** TECHNOSEAL
Substance / mixture mixture
Number R 34904
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
mixture's intended use Sprayable sealing product.
Disapproved uses of mixture For professional use only.
- 1.3. Details of the supplier of the safety data sheet**
Supplier
Name or trade name RETECH, s.r.o.
Address Vackova 1541/4, Praha 5 - Stodůlky, 155 00
Czech Republic
Identification number (ID) 25018205
Phone +420327596428
E-mail info@retech.cz
Web address www.retech.com
- Competent person responsible for the safety data sheet**
Name RETECH, s.r.o.
E-mail info@retech.cz
- 1.4. Emergency telephone number**
RETECH, Suchdol 212, 285 02 Suchdol u Kutné Hory, Czech Republic; Telephone number: +420 327 596 128 (7.30-16.00 hour)
Poisoning information centre, Na Bojišti 1, Praha, Czech Republic, Tel.: non-stop +420 224 919 293 or +420 224 915 402, Information on health risks only - acute poisoning of humans and animals.

SECTION 2: Hazards identification**2.1. Substance or mixture classification**
Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Eye Irrit. 2, H319

Full text of all classifications and hazard statements is given in the section 16.

Most serious adverse effects on human health and the environment

Causes serious eye irritation.

2.2. Label elements
Hazard pictogram**Signal word**

Warning

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P264 Wash hands thoroughly after handling.
P280 Wear eye protection/face protection.

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- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P501 Dispose of contents/container to in accordance with national regulations.

Supplemental information

EUH 208 Contains N-(3-(trimethoxysilyl)propyl)ethylenediamine, Dioctylbis(pentane-2,4-dionato-O,O')tin. May produce an allergic reaction.

2.3. Other hazards

Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of substances and additives specified below.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note.
Registration number: 01-2119545465-35	Reaction mass of octadecanamide, 12-hydroxy-n-[2-[(1-oxodecyl)amino]ethyl]- and n,n'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide) and decanamide, n,n'-1,2- ethanediylbis-	2,5-25	Aquatic Chronic 3, H412	
CAS: 1760-24-3 EC: 217-164-6	N-(3-(trimethoxysilyl)propyl) ethylenediamine	0,1-1,0	Skin Sens. 1B, H317 Eye Dam. 1, H318 Acute Tox. 4, H332 Aquatic Chronic 2, H411	1
CAS: 54068-28-9 EC: 483-270-6 Registration number: 01-0000020199-67	Dioctylbis(pentane-2,4-dionato-O,O')tin	0,1-1,0	Skin Sens. 1, H317 Repr. 2, H361fd STOT RE 2, H373 Aquatic Chronic 3, H412 Specific concentration limit: Skin Sens. 1, H317: C > 5 %	

Notes

1 The use of the substance is restricted by Annex XVII of REACH Regulation.

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

Inhalation

Terminate the exposure immediately; move the affected person to fresh air. In the event of issues, find medical advice.

Skin contact

Immediately wash with water and soap and rinse thoroughly. In the event of issues, find medical advice.

Eye contact

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Provide medical treatment, specialized if possible.

Ingestion

Rinse out the mouth with clean water. In the event of issues, find medical advice.

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

not available

Skin contact

not available

Eye contact

Causes serious eye irritation.

Ingestion

not available

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

not available

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Polyvalent foam, ABC powder, carbon dioxide.

Unsuitable extinguishing media

Unknown.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise.

5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Remove all ignition sources. Use personal protective equipment for work.

6.2. Environmental precautions

Absorb spillage to prevent material damage. Collect spillage. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Place the spilled product mechanically in the properly closed containers and dispose of it according to the section 13. After removal of the product, wash the contaminated site with plenty of water. Wash contaminated clothing before reuse.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Keep away from heat, open flames. Follow the usual measures for health protection at work. Take off contaminated clothing.

7.2. Conditions for safe storage, including any incompatibilities

Keep cool. Keep away from heat, open flames. Store in accordance with local regulations.

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

none

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DNEL

Reaction mass of octadecanamide, 12- hydroxy-n-[2-[(1-oxodecyl)amino]ethyl]- and n,n'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide) and decanamide, n,n'-1,2- ethanediylbis-

Workers / consumers	Route of exposure	Value	Effect	Determining method
Workers	Inhalation	3 mg/m ³	Systemic acute effects	
Workers	Dermal	11.2 mg/cm ²	Local acute effects	
Workers	Inhalation	3 mg/m ³	Local acute effects	
Workers	Dermal	3.75 mg/cm ²	Local chronic effects	
Workers	Inhalation	3 mg/m ³	Local chronic effects	
Consumers	Dermal	11.2 mg/cm ²	Local acute effects	
Consumers	Oral	0.56 mg/kg bw/day	Systemic chronic effects	
Consumers	Dermal	3.75 mg/cm ²	Local chronic effects	

PNEC

Reaction mass of octadecanamide, 12- hydroxy-n-[2-[(1-oxodecyl)amino]ethyl]- and n,n'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide) and decanamide, n,n'-1,2- ethanediylbis-

Route of exposure	Value	Determining method
Freshwater environment	43.2 µg/l	
Seawater	4.32 µg/l	
Microorganisms in wastewater treatment plants	10 mg/l	
Freshwater sediment	1080 mg/kg of dry substance of sediment	
Sea sediments	108 mg/kg of dry substance of sediment	
Soil (agricultural)	217 mg/kg of dry substance of soil	

8.2. Exposure controls

Keep away from heat, open flames. Follow the usual measures for health protection at work. Ensure good ventilation/exhaustion at the workplace. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Protective goggles.

Skin protection

Hand protection: Protective gloves.

Other protection: protective workwear.

Respiratory protection

Under regular circumstances it is not necessary.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

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SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	paste
Physical state	liquid at 20°C
color	grey
Odour	mild
Odour threshold	data not available
pH	data not available
Melting point/freezing point	data not available
Initial boiling point and boiling range	data not available
Flash point	data not available
Evaporation rate	data not available
Flammability (solid, gas)	data not available
Upper/lower flammability or explosive limits	
flammability limits	data not available
explosive limits	data not available
Vapour pressure	data not available
Vapour density	data not available
Relative density	1.5
Solubility(ies)	
solubility in water	insoluble
solubility in fats	data not available
Partition coefficient: n-octanol/water	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
Viscosity	data not available
Explosive properties	The product does not have explosive properties.
Oxidising properties	data not available

9.2. Other information

Density	1.5 g/cm ³
ignition temperature	data not available
content of organic solvents (VOC)	4.27 %

SECTION 10: Stability and reactivity**10.1. Reactivity**

Heating increases the fire hazard.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

not available

10.4. Conditions to avoid

Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

not available

10.6. Hazardous decomposition products

Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

No toxicological data is available for the mixture.

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Acute toxicity

Based on available data the classification criteria are not met.

Diocetylbis(pentane-2,4-dionato-O,O')tin

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex	Determining method	Source
Oral	LD ₅₀		2500 mg/kg		Rat		Literary studies	
Dermal	LD ₅₀	OECD 402	>2000000 mg/kg		Rat		Experimentally	

N-(3-(trimethoxysilyl)propyl)ethylenediamine

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex	Determining method	Source
Oral	LD ₅₀	OECD 401	2413 mg/kg bw		Rat	F/M	Experimentally	
Oral	LD ₅₀		7684 mg/kg bw		Rat	M	Experimentally	Equivalent to OECD 401
Dermal	LD ₅₀		16480 mg/kg bw	24 hour	Rabbit	F/M	Experimentally	Equivalent to OECD 402
Inhalation	LC ₅₀	OECD 403	1.49-2.44 mg/l of air	4 hour	Rat	F/M	Experimentally	

Reaction mass of octadecanamide, 12- hydroxy-n-[2-[(1-oxodecyl)amino]ethyl]- and n,n'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide) and decanamide, n,n'-1,2- ethanedylbis-

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex	Determining method	Source
Oral	LD ₅₀	OECD 423	>2000 mg/kg		Rat	F	Experimentally	
Dermal	LD ₅₀	OECD 402	>2000 mg/kg	24 hour	Rat	F/M	Experimentally	
Inhalation	LD ₅₀	OECD 403	>5.11 mg/l of air	4 hour	Rat	F/M	Experimentally	

Skin corrosion/irritation

Based on available data the classification criteria are not met.

Diocetylbis(pentane-2,4-dionato-O,O')tin

Route of exposure	Result	Method	Time of exposure	Species	Determining method	Source
Skin	Not irritating				Literary studies	

N-(3-(trimethoxysilyl)propyl)ethylenediamine

Route of exposure	Result	Method	Time of exposure	Species	Determining method	Source
Skin	Not irritating	OECD 404	4 hour	Rabbit	Experimentally	Time point: 24 48 72 h

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Reaction mass of octadecanamide, 12- hydroxy-n-[2-[(1-oxodecyl)amino]ethyl]- and n,n'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide) and decanamide, n,n'-1,2- ethanediylbis-

Route of exposure	Result	Method	Time of exposure	Species	Determining method	Source
Skin	Slightly irritating	OECD 404	4 hour	Rabbit	Experimentally	Time point: 24 48 72 hod.

Serious eye damage/irritation

Causes serious eye irritation.

Diocetylbis(pentane-2,4-dionato-O,O')tin

Route of exposure	Result	Method	Time of exposure	Species	Determining method	Source
Eye	Not irritating				Literary studies	

N-(3-(trimethoxysilyl)propyl)ethylenediamine

Route of exposure	Result	Method	Time of exposure	Species	Determining method	Source
Eye	Serious eye damage	OECD 405	21 day	Rabbit	Experimentally	Time point: 1 24 48 72 h

Reaction mass of octadecanamide, 12- hydroxy-n-[2-[(1-oxodecyl)amino]ethyl]- and n,n'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide) and decanamide, n,n'-1,2- ethanediylbis-

Route of exposure	Result	Method	Time of exposure	Species	Determining method	Source
Eye	Slightly irritating	OECD 405		Rabbit	Experimentally	Time point: 1 24 48 72 hod.

Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

Diocetylbis(pentane-2,4-dionato-O,O')tin

Route of exposure	Result	Method	Time of exposure	Species	Sex	Determining method
Skin	Sensitizing	OECD 429				Experimentally

N-(3-(trimethoxysilyl)propyl)ethylenediamine

Route of exposure	Result	Method	Time of exposure	Species	Sex	Determining method
Skin	Sensitizing	OECD 406	72 hour	Guinea-pig		Experimentally

Reaction mass of octadecanamide, 12- hydroxy-n-[2-[(1-oxodecyl)amino]ethyl]- and n,n'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide) and decanamide, n,n'-1,2- ethanediylbis-

Route of exposure	Result	Method	Time of exposure	Species	Sex	Determining method
Skin	Not sensitizing	OECD 429		Mouse	F	Experimentally

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Mutagenicity

N-(3-(trimethoxysilyl)propyl)ethylenediamine

Result	Method	Time of exposure	Specific target organ	Species	Sex	Determining method	Source
Negative	OECD 471			Bacteria (Salmonella typhimurium)		Experimentally	
Negative	in vitro		Ovary	Chinese hamster		Experimentally	
Negative	in vitro		Ovary	Chinese hamster		Experimentally	Equivalent to OECD 479
Negative	in vivo	30-48-72 hour		Mouse	F/M	Experimentally	Equivalent to OECD 474

Reaction mass of octadecanamide, 12- hydroxy-n-[2-[(1-oxodecyl)amino]ethyl]- and n,n'-ethane-1,2-diylbis- (12-hydroxyoctadecan- 1-amide) and decanamide, n,n'-1,2- ethanediylbis-

Result	Method	Time of exposure	Specific target organ	Species	Sex	Determining method	Source
Negative	OECD 476			Mouse (lymphoma)		Experimentally	
Negative	OECD 471			Bacteria (Salmonella typhimurium)		Experimentally	
Negative	OECD 473			Human lymphocytes		Experimentally	

Germ cell mutagenicity

Based on available data the classification criteria are not met.

Carcinogenicity

Based on available data the classification criteria are not met.

Reproductive toxicity

Based on available data the classification criteria are not met.

N-(3-(trimethoxysilyl)propyl)ethylenediamine

	Parameter	Method	Value	Time of exposure	Result	Species	Sex	Determining method
Evolution toxicity	NOAEL	OECD 422	500 mg/kg bw/day	39 day	Teratogenicity	Rat	F/M	Experimentally
Effects on fertility	NOAEL	OECD 422	≥500 mg/kg bw/day	39-44 day	Maternal toxicity	Rat	F	Experimentally

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Reaction mass of octadecanamide, 12- hydroxy-n-[2-[(1-oxodecyl)amino]ethyl]- and n,n'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide) and decanamide, n,n'-1,2- ethanediylbis-

	Parameter	Method	Value	Time of exposure	Result	Species	Sex	Determining method
Effects on fertility	NOAEL	OECD 421	1000 mg/kg bw/day		No effect	Rat	F/M	Experimentally

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

N-(3-(trimethoxysilyl)propyl)ethylenediamine

Route of exposure	Parameter	Method	Value	Time of exposure	Specific target organ	Result	Species	Sex	Determining method
Oral	NOAEL	OECD 422	500 mg/kg bw	28 day		Systemic toxicity	Rat	F/M	Experimentally
Dermal	NOAEL		≥2 ml/kg	8 day			Rabbit	M	Experimentally
Dermal	LOAEL		257.5 mg/kg bw/day	11 day (6 hour/day)	Skin	Irritating	Rat	F/M	Experimentally

Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

Aspiration hazard

Based on available data the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

Data for the mixture are not available.

Diocylbis(pentane-2,4-dionato-O,O')tin

Parameter	Method	Value	Time of exposure	Species	Environment	Determining method	Source
LC ₅₀	OECD 203	86 mg/l	96 hour	Fishes (Pisces)		Experimentally, Static system	
EC ₅₀	OECD 202	58.6 mg/l	48 hour	Daphnia (Daphnia magna)		Experimentally, Static system	
EC ₅₀	OECD 201	300 mg/l	24 hour	Algae (Scenedesmus subspicatus)		Experimentally, Static system	

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N-(3-(trimethoxysilyl)propyl)ethylenediamine

Parameter	Method	Value	Time of exposure	Species	Environment	Determining method	Source
LC ₅₀		213 mg/l	96 hour	Fishes (Salmo gairdneri)	Freshwater	Experimentally, Nominal concentration, Static system	EPA 660/3 - 75/009
EC ₅₀	OECD 202	90 mg/l	48 hour	Daphnia (Daphnia magna)	Freshwater	Experimentally, GLP, Static system	
ErC ₅₀	OECD 201	8.8 mg/l	72 hour	Algae (Selenastrum capricornutum)	Freshwater	Experimentally, GLP	
EC ₅₀		67 mg/l	16 hour	Aquatic mikroorganisms (Pseudomonas putida)	Freshwater	Experimentally, GLP, Static system	DIN 38412-8

Reaction mass of octadecanamide, 12- hydroxy-n-[2-[(1-oxodecyl)amino]ethyl]- and n,n'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide) and decanamide, n,n'-1,2- ethanediylbis-

Parameter	Method	Value	Time of exposure	Species	Environment	Determining method	Source
NOEC	OECD 203	≥100 mg/l	96 hour	Fishes (Oncorhynchus mykiss)	Freshwater	Experimentally, GLP, Static system	
LC ₅₀	OECD 202	94.9 mg/l	48 hour	Daphnia (Daphnia magna)	Freshwater	Experimentally, GLP, Static system	
LC ₅₀	OECD 201	43.2 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)	Freshwater	Experimentally, Semi static system, Indicator of growth	
EC ₅₀	OECD 209	>1000 mg/l	3 hour	Microorganisms (Activated sludge)	Freshwater	Experimentally, GLP, Static system	

12.2. Persistence and degradability
Biodegradability

N-(3-(trimethoxysilyl)propyl)ethylenediamine

Parameter	Method	Value	Time of exposure	Environment	Determining method	Result	Source
Closed Bottle Test	OECD 301D	60 %	28 day	Freshwater	Experimentally		
DOC Die-Away Test	OECD 301A	>98 %	28 day	Freshwater	Experimentally		
AOPWIN v1.91			1,059 hour	Atmosphere	Calculation of value		DT50 air

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N-(3-(trimethoxysilyl)propyl)ethylenediamine

Parameter	Method	Value	Time of exposure	Environment	Determining method	Result	Source
pH <7			0,3 hour		Experimentally	Biodegradable	t1/2 water: OECD 111: Hydrolysis as a function of pH
pH = 7			0,025 hour		Experimentally	Biodegradable	t1/2 water: OECD 111: Hydrolysis as a function of pH

Reaction mass of octadecanamide, 12- hydroxy-n-[2-[(1-oxodecyl)amino]ethyl]- and n,n'-ethane-1,2-diylobis (12-hydroxyoctadecan- 1-amide) and decanamide, n,n'-1,2- ethanediylbis-

Parameter	Method	Value	Time of exposure	Environment	Determining method	Result	Source
Closed Bottle Test	OECD 301D	60 %	28 day	Freshwater	Experimentally		

Contains readily biodegradable component(s).

12.3. Bioaccumulative potential

N-(3-(trimethoxysilyl)propyl)ethylenediamine

Parameter	Method	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]	Determining method	Source
Log Kow		-1.67				25°C		KOWWIN, Estimated value

Reaction mass of octadecanamide, 12- hydroxy-n-[2-[(1-oxodecyl)amino]ethyl]- and n,n'-ethane-1,2-diylobis (12-hydroxyoctadecan- 1-amide) and decanamide, n,n'-1,2- ethanediylbis-

Parameter	Method	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]	Determining method	Source
Log Kow	OECD 117	8.6				25°C	Experimentally	

Contains bioaccumulative component(s).

12.4. Mobility in soil

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N-(3-(trimethoxysilyl)propyl)ethylenediamine

Parameter	Method	Value	Environment	Surrounding temperature	Determining method	Source
Fraction air		31.3 %			Calculation of value	Mackay level III
Fraction sediment		0.00 %			Calculation of value	Mackay level III
Fraction soil		63.6 %			Calculation of value	Mackay level III
Fraction water		5.2 %			Calculation of value	Mackay level III

Reaction mass of octadecanamide, 12- hydroxy-n-[2-[(1-oxodecyl)amino]ethyl]- and n,n'-ethane-1,2-diylbis (12-hydroxyoctadecan- 1-amide) and decanamide, n,n'-1,2- ethanediylbis-

Parameter	Method	Value	Environment	Surrounding temperature	Determining method	Source
Log Koc	OECD 121	5.4			Experimentally	

Contains component(s) that adsorb(s) into the soil.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Smaller quantities can be disposed with household waste. Perfectly cleaned containers can be submitted for recycling.

Legislation of waste

Council Directive 75/442/EEC on waste, as amended. Decree No. 383/2001 Coll., on details regarding waste handling as amended. Decree No. 93/2016 Coll., (waste catalogue) as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

Waste type code

08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09

Packaging waste type code

15 01 02 plastic packaging

SECTION 14: Transport information

14.1. UN number

Not subject to ADR.

14.2. UN proper shipping name

not available

14.3. Transport hazard class(es)

not available

14.4. Packing group

not available

14.5. Environmental hazards

No

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14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not available

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended. The Act No. 350/2011 Coll., on Chemical Substances and Chemical Preparations as amended (the Chemical Act). Decree No. 432/2003 Coll., laying down conditions for assigning categories to individual jobs, limit values of indices from biological exposure tests, conditions for the sampling of biological materials for biological exposure and the particulars of the reports on work with asbestos and biological agents as amended.

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Restrictions pursuant to Annex XVII of Regulation (EC) No. 1907/2006 (REACH), as amended

N-(3-(trimethoxysilyl)propyl)ethylenediamine

Restriction	Conditions of restriction
03	<p>1. Shall not be used in:</p> <ul style="list-style-type: none"> — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects, <p>2. Articles not complying with paragraph 1 shall not be placed on the market.</p> <p>3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:</p> <ul style="list-style-type: none"> — can be used as fuel in decorative oil lamps for supply to the general public, and, — present an aspiration hazard and are labelled with R65 or H304, <p>4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).</p> <p>5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:</p> <ul style="list-style-type: none"> (a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life-threatening lung damage"; (b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may lead to life threatening lung damage"; (c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010. <p>6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304, intended for supply to the general public.</p> <p>7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.</p>

15.2. Chemical safety assessment

not available

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

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- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

Guidelines for safe handling used in the safety data sheet

- P101 If medical advice is needed, have product container or label at hand.
- P102 Keep out of reach of children.
- P280 Wear eye protection/face protection.
- P264 Wash hands thoroughly after handling.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P501 Dispose of contents/container to in accordance with national regulations.

A list of additional standard phrases used in the safety data sheet

- EUH 208 Contains N-(3-(trimethoxysilyl)propyl)ethylenediamine, Dioctylbis(pentane-2,4-dionato-O,O')tin. May produce an allergic reaction.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

- ADR European agreement concerning the international carriage of dangerous goods by road
- BCF Bioconcentration Factor
- CAS Chemical Abstracts Service
- CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
- DNEL Derived no-effect level
- EC Identification code for each substance listed in EINECS
- EC₅₀ Concentration of a substance when it is affected 50% of the population
- EINECS European Inventory of Existing Commercial Chemical Substances
- EmS Emergency plan
- EU European Union
- IATA International Air Transport Association
- IBC International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
- IC₅₀ Concentration causing 50% blockade
- ICAO International Civil Aviation Organization
- IMDG International Maritime Dangerous Goods
- INCI International Nomenclature of Cosmetic Ingredients
- ISO International Organization for Standardization
- IUPAC International Union of Pure and Applied Chemistry
- LC₅₀ Lethal concentration of a substance in which it can be expected death of 50% of the population
- LD₅₀ Lethal dose of a substance in which it can be expected death of 50% of the population
- LOAEC Lowest observed adverse effect concentration
- LOAEL Lowest observed adverse effect level
- log Kow Octanol-water partition coefficient
- MARPOL International Convention for the Prevention of Pollution From Ships
- NOAEC No observed adverse effect concentration
- NOAEL No observed adverse effect level
- NOEC No observed effect concentration
- NOEL No observed effect level
- OEL Occupational Exposure Limits
- PBT Persistent, Bioaccumulative and Toxic

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PNEC	Predicted no-effect concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Acute Tox.	Acute toxicity
Aquatic Chronic	Hazardous to the aquatic environment
Eye Dam.	Serious eye damage
Eye Irrit.	Eye irritation
Repr.	Reproductive toxicity
Skin Sens.	Skin sensitization
STOT RE	Specific target organ toxicity - repeated exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. The Act No. 350/2011 Coll., on Chemical Substances and Chemical Preparations as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

2, 3, 8, 11, 12, 15, 16

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.