

## Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

#### 1.1 Product identifier

**kline Knet Metall**  
**Article-number: 2850100**

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

**Relevant identified uses of the substance or mixture:**

Sealant

**Uses advised against:**

No information available at present.

#### 1.3 Details of the supplier of the safety data sheet

(GB)

DKS Technik GmbH Gnadenwald 90a A-6069 Gnadenwald,  
 Phone: +43 (0) 52 23/484 88  
 office@dks.at www.dinitrol.at

#### 1.4 Emergency telephone number

**Emergency information services / official advisory body:**

---

**Telephone number of the company in case of emergencies:**

Tel.: +43 (0) 52 23/484 88

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) 1272/2008 (CLP)**

Hazard class	Hazard category	Hazard statement
Skin Irrit.	2	H315-Causes skin irritation.
Eye Dam.	1	H318-Causes serious eye damage.
Skin Sens.	1	H317-May cause an allergic skin reaction.
Aquatic Chronic	2	H411-Toxic to aquatic life with long lasting effects.

#### 2.2 Label elements

**Labeling according to Regulation (EC) 1272/2008 (CLP)**



Danger

H315-Causes skin irritation. H318-Causes serious eye damage. H317-May cause an allergic skin reaction. H411-Toxic to aquatic life with long lasting effects.

P264-Wash hands thoroughly after handling. P273-Avoid release to the environment. P280-Wear protective gloves and eye protection/face protection.  
 P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310-Immediately call a POISON CENTER/doctor.

EUH205-Contains epoxy constituents. May produce an allergic reaction.

reaction product bisphenol A-(epichlorhydrin), epoxy resin (number average molecular weight <= 700)  
 2,4,6-Tris(dimethylaminomethyl)phenol

### 2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006.

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006.

Contains epoxy constituents. Avoid skin contact. Protective gloves should be worn.

## SECTION 3: Composition/information on ingredients

### 3.1 Substance

n.a.

### 3.2 Mixture

reaction product bisphenol A-(epichlorhydrin), epoxy resin (number average molecular weight <= 700)	
Registration number (REACH)	--
Index	603-074-00-8
EINECS, ELINCS, NLP	500-033-5 (NLP)
CAS	25068-38-6
content %	10-30
Classification according to Regulation (EC) 1272/2008 (CLP)	Eye Irrit. 2, H319 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411
2,4,6-Tris(dimethylaminomethyl)phenol	
Registration number (REACH)	--
Index	603-069-00-0
EINECS, ELINCS, NLP	202-013-9
CAS	90-72-2
content %	1-3
Classification according to Regulation (EC) 1272/2008 (CLP)	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1/3.2 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### Inhalation

Supply person with fresh air and consult doctor according to symptoms.

#### Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

#### Eye contact

Remove contact lenses.  
Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

### **Ingestion**

Rinse the mouth thoroughly with water.  
Call doctor immediately - have Data Sheet available.

### **4.2 Most important symptoms and effects, both acute and delayed**

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.  
In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

### **4.3 Indication of any immediate medical attention and special treatment needed**

Symptomatic treatment

## **SECTION 5: Firefighting measures**

### **5.1 Extinguishing media**

#### **Suitable extinguishing media**

Water jet spray/foam/CO2/dry extinguisher

#### **Unsuitable extinguishing media**

High volume water jet

### **5.2 Special hazards arising from the substance or mixture**

In case of fire the following can develop:

Oxides of carbon  
Oxides of nitrogen  
Hydrogen chloride  
Toxic gases

### **5.3 Advice for firefighters**

In case of fire and/or explosion do not breathe fumes.  
Protective respirator with independent air supply.  
According to size of fire  
Full protection, if necessary  
Dispose of contaminated extinction water according to official regulations.

## **SECTION 6: Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Ensure sufficient supply of air.  
Avoid contact with eyes or skin.  
If applicable, caution - risk of slipping

### **6.2 Environmental precautions**

If leakage occurs, dam up.  
Resolve leaks if this possible without risk.  
Prevent from entering drainage system.  
Prevent surface and ground-water infiltration, as well as ground penetration.  
If accidental entry into drainage system occurs, inform responsible authorities.

### **6.3 Methods and material for containment and cleaning up**

Pick up mechanically and dispose of according to Section 13.

### **6.4 Reference to other sections**

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

## **SECTION 7: Handling and storage**

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

### **7.1 Precautions for safe handling**

#### **7.1.1 General recommendations**

Ensure good ventilation.  
Avoid contact with eyes or skin.  
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.  
Observe directions on label and instructions for use.  
Use working methods according to operating instructions.

#### **7.1.2 Notes on general hygiene measures at the workplace**

General hygiene measures for the handling of chemicals are applicable.  
Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.  
 Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

**7.2 Conditions for safe storage, including any incompatibilities**

Keep out of access to unauthorised individuals.  
 Not to be stored in gangways or stair wells.  
 Store product closed and only in original packing.  
 Protect from direct sunlight and warming.  
 Store in a well-ventilated place.  
 Store in a dry place.  
 Store cool

**7.3 Specific end use(s)**

No information available at present.

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

<b>Chemical Name</b>	Silica glass		<b>Content %:</b>
WEL-TWA:	0,08 mg/m <sup>3</sup> (fused, respirable dust)	WEL-STEL: ---	---
Monitoring procedures:	---		
BMGV: ---	Other information: ---		
<b>Chemical Name</b>	Talc		<b>Content %:</b>
WEL-TWA:	1 mg/m <sup>3</sup> (res. dust)	WEL-STEL: ---	---
Monitoring procedures:	---		
BMGV: ---	Other information: ---		
<b>Chemical Name</b>	Calcium carbonate		<b>Content %:</b>
WEL-TWA:	4 mg/m <sup>3</sup> (respirable dust), 10 mg/m <sup>3</sup> (total inhalable dust)	WEL-STEL: ---	---
Monitoring procedures:	---		
BMGV: ---	Other information: ---		

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.  
 \*\* = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

reaction product bisphenol A-(epichlorhydrin), epoxy resin (number average molecular weight <= 700)						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	8,33	mg/kg bw/day	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	12,25	mg/m <sup>3</sup>	
Consumer	Human - dermal	Short term, systemic effects	DNEL	3,571	mg/kg bw/day	
Consumer	Human - oral	Short term, systemic effects	DNEL	0,75	mg/kg bw/day	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,75	mg/kg bw/day	
	Environment - freshwater		PNEC	0,003	mg/l	
	Environment - marine		PNEC	0,0003	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	0,018	mg/l	
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - sediment, freshwater		PNEC	0,5	mg/kg dw	

	Environment - sediment, marine		PNEC	0,5	mg/kg dw	
	Environment - soil		PNEC	0,05	mg/kg dw	
	Environment - oral (animal feed)		PNEC	11	mg/kg	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	8,3	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	12,3	mg/m3	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,75	mg/m3	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	0,75	mg/m3	

<b>Calcium carbonate</b>						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	10	mg/m3	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	10	mg/m3	
Consumer	Human - oral	Short term, systemic effects	DNEL	6,1	mg/kg bw/day	
Consumer	Human - oral	Long term, systemic effects	DNEL	6,1	mg/kg bw/day	
	Environment - sewage treatment plant		PNEC	100	mg/l	

## 8.2 Exposure controls

### 8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn. Applies only if maximum permissible exposure values are listed here.

### 8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:

Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:

Chemical resistant protective gloves (EN 374).

If applicable

Protective gloves in butyl rubber (EN 374).

Protective nitrile gloves (EN 374)

Minimum layer thickness in mm:

0,4

Permeation time (penetration time) in minutes:

>= 480

The breakthrough times determined in accordance with EN 374 Part 3 were not obtained under practical conditions.

The recommended maximum wearing time is 50% of breakthrough time.

Protective hand cream recommended.

Skin protection - Other:

Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments)

Respiratory protection:

Normally not necessary.

Thermal hazards:

Not applicable

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.

Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

### 8.2.3 Environmental exposure controls

No information available at present.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state:	Solid
Colour:	Darkish, Grey, Black
Odour:	Odourless
Odour threshold:	Not determined
pH-value:	Not determined
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	Not determined
Flash point:	Not determined
Evaporation rate:	n.a.
Flammability (solid, gas):	Not determined
Lower explosive limit:	n.a.
Upper explosive limit:	n.a.
Vapour pressure:	n.a.
Vapour density (air = 1):	Not determined
Density:	2,18 (relative density )
Bulk density:	Not determined
Solubility(ies):	Not determined
Water solubility:	Insoluble
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	n.a.
Explosive properties:	Product is not explosive.
Oxidising properties:	No

### 9.2 Other information

Miscibility:	Not determined
Fat solubility / solvent:	Not determined
Conductivity:	Not determined
Surface tension:	Not determined
Solvents content:	Not determined

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

The product has not been tested.

### 10.2 Chemical stability

Stable with proper storage and handling.

### 10.3 Possibility of hazardous reactions

No dangerous reactions are known.

### 10.4 Conditions to avoid

See also section 7.

Heating

T > 35°C

### 10.5 Incompatible materials

See also section 7.

Avoid contact with strong oxidizing agents.

Avoid contact with strong alkalis.  
 Avoid contact with strong acids.

### 10.6 Hazardous decomposition products

See also section 5.2

No decomposition when used as directed.

## SECTION 11: Toxicological information

Possibly more information on health effects, see Section 2.1 (classification).

<b>Kaltmetall</b>						
<b>Artikel-Nr. LOS362</b>						
<b>Toxicity/effect</b>	<b>Endpoint</b>	<b>Value</b>	<b>Unit</b>	<b>Organism</b>	<b>Test method</b>	<b>Notes</b>
Acute toxicity, by oral route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by dermal route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

<b>reaction product bisphenol A-(epichlorhydrin), epoxy resin (number average molecular weight &lt;= 700)</b>						
<b>Toxicity/effect</b>	<b>Endpoint</b>	<b>Value</b>	<b>Unit</b>	<b>Organism</b>	<b>Test method</b>	<b>Notes</b>
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit		
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Irritant
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Sensitising
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Positive
Carcinogenicity:				Rat	OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	Negative
Specific target organ toxicity - repeated exposure (STOT-RE):	NOAEL	100	mg/kg bw/d			
Specific target organ toxicity - repeated exposure (STOT-RE):	NOAEL	50	mg/kg bw/d			
Symptoms:						diarrhoea, weight loss

### 2,4,6-Tris(dimethylaminomethyl)phenol

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	1630	mg/kg			
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Corrosive
Serious eye damage/irritation:				Rabbit		Corrosive
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Yes (skin contact)
Germ cell mutagenicity:						Negative
Specific target organ toxicity - repeated exposure (STOT-RE):	NOAEL	15	mg/kg		OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Development. Tox. Screening Test)	Target organ(s): liver, Target organ(s): brain

<b>Talc</b>						
Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Skin corrosion/irritation:						Not irritant
Serious eye damage/irritation:						Not irritant
Respiratory or skin sensitisation:						Not sensitizing
Germ cell mutagenicity:						Negative
Carcinogenicity:						Negative
Reproductive toxicity:				Rat		Negative
Symptoms:						mucous membrane irritation

<b>Calcium carbonate</b>						
Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	OECD 420 (Acute Oral toxicity - Fixed Dose Procedure)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>3	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Not sensitizing
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:					OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Germ cell mutagenicity:					OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Carcinogenicity:						No indications of such an effect.

Reproductive toxicity:	NOEL	1000	mg/kg bw/d	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Develo pm. Tox. Screening Test)	
Specific target organ toxicity - single exposure (STOT-SE):						No indications of such an effect.
Specific target organ toxicity - repeated exposure (STOT- RE):						No indications of such an effect.
Aspiration hazard:						No
Symptoms:						blood in urine (haematuria), nausea and vomiting.

## SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

<b>Kaltmetall</b>							
<b>Artikel-Nr. LOS362</b>							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:							n.d.a.
Toxicity to daphnia:							n.d.a.
Toxicity to algae:							n.d.a.
Persistence and degradability:							n.d.a.
Bioaccumulative potential:							n.d.a.
Mobility in soil:							n.d.a.
Results of PBT and vPvB assessment							n.d.a.
Other adverse effects:							n.d.a.

<b>reaction product bisphenol A-(epichlorhydrin), epoxy resin (number average molecular weight &lt;= 700)</b>							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	1,2	mg/l	Oncorhynchus mykiss	U.S. EPA ECOTOX Database	
Toxicity to daphnia:	EC50	48h	1,1	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
Toxicity to algae:	EC50	72h	9,4	mg/l	Selenastrum capricornutum	U.S. EPA ECOTOX Database	
Persistence and degradability:		28d	5	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	
Bioaccumulative potential:	Log Pow		3,8				

<b>2,4,6-Tris(dimethylaminomethyl)phenol</b>							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	175	mg/l			
Toxicity to daphnia:	LC50	96h	718	mg/l			
Toxicity to algae:	EC50	72h	84	mg/l		OECD 201 (Alga, Growth Inhibition Test)	

Persistence and degradability:		28d	4	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	
Bioaccumulative potential:	Log Pow		0,219				

Talc							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Water solubility:			< 0,1	%			

Calcium carbonate							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	>100	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	v/v saturated solution of test material
Toxicity to daphnia:	LC50	48h	>1	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	v/v saturated solution of test material
Toxicity to algae:	EC50	72h	>14	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
Toxicity to algae:	NOEC/NO EL	72h	14	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
Persistence and degradability:							Not relevant for inorganic substances.
Bioaccumulative potential:							No
Mobility in soil:							n.a.
Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	3h	>1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Toxicity to bacteria:	NOEC/NO EL	3h	1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Other organisms:	NOEC/NO EL	14d	1000	mg/kg dw	Eisenia foetida	OECD 207 (Earthworm, Acute Toxicity Tests)	
Other organisms:	NOEC/NO EL	21d	1000	mg/kg dw		OECD 208 (Terrestrial Plants, Growth Test)	Glycine max
Other organisms:	NOEC/NO EL	21d	1000	mg/kg dw		OECD 208 (Terrestrial Plants, Growth Test)	Avena sativa

Other organisms:	NOEC/NO EL	21d	1000	mg/kg dw		OECD 208 (Terrestrial Plants, Growth Test)	Lycopersicon esculentum
Other organisms:	NOEC/NO EL	28d	1000	mg/kg dw		OECD 216 (Soil Microorganisms - Nitrogen Transformation Test)	
Water solubility:			0,0166	g/l		OECD 105 (Water Solubility)	20°C

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)

08 04 09 waste adhesives and sealants containing organic solvents or other hazardous substances

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations

E.g. dispose at suitable refuse site.

E.g. suitable incineration plant.

#### For contaminated packing material

Pay attention to local and national official regulations

Empty container completely.

Untampered packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

## SECTION 14: Transport information

### General statements

UN number: 3077

#### Transport by road/by rail (ADR/RID)

UN proper shipping name:

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (EPOXY RESIN)

Transport hazard class(es):

9

Packing group:

III

Classification code:

M7

LQ (ADR 2015):

5 kg

Environmental hazards:

environmentally hazardous

Tunnel restriction code:

E

#### Transport by sea (IMDG-code)

UN proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (EPOXY RESIN)

Transport hazard class(es):

9

Packing group:

III

EmS:

F-A, S-F

Marine Pollutant:

Yes

Environmental hazards:

environmentally hazardous

#### Transport by air (IATA)

UN proper shipping name:

Environmentally hazardous substance, solid, n.o.s. (EPOXY RESIN)

Transport hazard class(es):

9

Packing group:

III

Environmental hazards:

environmentally hazardous

### Special precautions for user



Persons employed in transporting dangerous goods must be trained.  
 All persons involved in transporting must observe safety regulations.  
 Precautions must be taken to prevent damage.

### Transport in bulk according to Annex II of MARPOL and the IBC Code

Freighted as packaged goods rather than in bulk, therefore not applicable.  
 Minimum amount regulations have not been taken into account.  
 Danger code and packing code on request.  
 Comply with special provisions.

## SECTION 15: Regulatory information

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

For classification and labelling see Section 2.

Observe restrictions:

Comply with trade association/occupational health regulations.

Observe youth employment law (German regulation).

Directive 2010/75/EU (VOC):

< 1 %

### 15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

## SECTION 16: Other information

Revised sections:

n.a.

These details refer to the product as it is delivered.

Employee instruction/training in handling hazardous materials is required.

Employee training in handling dangerous goods is required.

### Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Skin Irrit. 2, H315	Classification according to calculation procedure.
Eye Dam. 1, H318	Classification according to calculation procedure.
Skin Sens. 1, H317	Classification according to calculation procedure.
Aquatic Chronic 2, H411	Classification according to calculation procedure.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

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.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

Skin Irrit. — Skin irritation

Eye Dam. — Serious eye damage

Skin Sens. — Skin sensitization

Aquatic Chronic — Hazardous to the aquatic environment - chronic

Eye Irrit. — Eye irritation

Acute Tox. — Acute toxicity - oral

Acute Tox. — Acute toxicity - dermal

Skin Corr. — Skin corrosion

**Any abbreviations and acronyms used in this document:**

## AC Article Categories

acc., acc. to according, according to

ACGIH American Conference of Governmental Industrial Hygienists

ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)

AOEL Acceptable Operator Exposure Level

AOX Adsorbable organic halogen compounds

approx. approximately

Art., Art. no. Article number

ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)

BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)

BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)

BCF Bioconcentration factor

BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)

BHT Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol)

BMGV Biological monitoring guidance value (EH40, UK)

BOD Biochemical oxygen demand

BSEF Bromine Science and Environmental Forum

bw body weight

CAS Chemical Abstracts Service

CEC Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids

CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques

CIPAC Collaborative International Pesticides Analytical Council

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)

CMR carcinogenic, mutagenic, reproductive toxic

COD Chemical oxygen demand

CTFA Cosmetic, Toiletry, and Fragrance Association

DMEL Derived Minimum Effect Level

DNEL Derived No Effect Level

DOC Dissolved organic carbon

DT50 Dwell Time - 50% reduction of start concentration

DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)

dw dry weight

e.g. for example (abbreviation of Latin 'exempli gratia'), for instance

EC European Community

ECHA European Chemicals Agency

EEA European Economic Area

EEC European Economic Community

EINECS European Inventory of Existing Commercial Chemical Substances

ELINCS European List of Notified Chemical Substances

EN European Norms

EPA United States Environmental Protection Agency (United States of America)

ERC Environmental Release Categories

ES Exposure scenario

etc. et cetera

EU European Union

EWC European Waste Catalogue

Fax. Fax number

gen. general

GHS Globally Harmonized System of Classification and Labelling of Chemicals

GWP Global warming potential

HET-CAM Hen's Egg Test - Chorionallantoic Membrane

HGWP Halocarbon Global Warming Potential

IARC International Agency for Research on Cancer

IATA International Air Transport Association

IBC Intermediate Bulk Container

IBC (Code) International Bulk Chemical (Code)

IC Inhibitory concentration

IMDG-code International Maritime Code for Dangerous Goods

incl. including, inclusive

IUCLID International Uniform Chemical Information Database

LC lethal concentration

LC50 lethal concentration 50 percent kill

LCLo lowest published lethal concentration

LD Lethal Dose of a chemical

LD50 Lethal Dose, 50% kill  
 LDLo Lethal Dose Low  
 LOAEL Lowest Observed Adverse Effect Level  
 LOEC Lowest Observed Effect Concentration  
 LOEL Lowest Observed Effect Level  
 LQ Limited Quantities  
 MARPOL International Convention for the Prevention of Marine Pollution from Ships  
 n.a. not applicable  
 n.av. not available  
 n.c. not checked  
 n.d.a. no data available  
 NIOSH National Institute of Occupational Safety and Health (United States of America)  
 NOAEC No Observed Adverse Effective Concentration  
 NOAEL No Observed Adverse Effect Level  
 NOEC No Observed Effect Concentration  
 NOEL No Observed Effect Level  
 ODP Ozone Depletion Potential  
 OECD Organisation for Economic Co-operation and Development  
 org. organic  
 PAH polycyclic aromatic hydrocarbon  
 PBT persistent, bioaccumulative and toxic  
 PC Chemical product category  
 PE Polyethylene  
 PNEC Predicted No Effect Concentration  
 POCP Photochemical ozone creation potential  
 ppm parts per million  
 PROC Process category  
 PTFE Polytetrafluorethylene  
 REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)  
 REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.  
 RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)  
 SADT Self-Accelerating Decomposition Temperature  
 SAR Structure Activity Relationship  
 SU Sector of use  
 SVHC Substances of Very High Concern  
 Tel. Telephone  
 ThOD Theoretical oxygen demand  
 TOC Total organic carbon  
 TRGS Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances)  
 UN RTDG United Nations Recommendations on the Transport of Dangerous Goods  
 VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))  
 VOC Volatile organic compounds  
 vPvB very persistent and very bioaccumulative  
 WEL-TWA, WEL-STEL WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).  
 WHO World Health Organization  
 wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.  
 No responsibility.