

**SECTION 1: Identification of the substance / preparation and of the company****1.1 Product identifier****MD-pox (Part A)  
Article number MPO****1.2 Relevant identified uses of the substance or mixture and uses advised against****1.2.1 Relevant uses**

Adhesive

**1.2.2 Uses advised against**

None known.

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

<b>Company</b>	Marston Domsel GmbH Bergheimer Str. 15 53909 Zülpich / GERMANY Phone 0 22 52 / 94 15 - 0 Fax 0 22 52 / 17 44 Homepage <a href="http://www.marston-domsel.de">www.marston-domsel.de</a> E-mail <a href="mailto:info@marston-domsel.de">info@marston-domsel.de</a>
----------------	--

**Address enquiries to**

<b>Technical information</b>	<a href="mailto:info@marston-domsel.de">info@marston-domsel.de</a>
<b>Safety Data Sheet</b>	<a href="mailto:sdb@chemiebuero.de">sdb@chemiebuero.de</a>

**1.4 Emergency phone**

<b>Advisory body</b>	+49 (0)89-19240 (24h) (english)
----------------------	---------------------------------

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]**

Eye Irrit. 2: H319 Causes serious eye irritation.  
 Skin Irrit. 2: H315 Causes skin irritation.  
 Skin Sens. 1: H317 May cause an allergic skin reaction.  
 Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects.

**2.1.2 Classification according to Regulation 67/548/EEC or 1999/45/EC**

Xi, Irritant - R 36/38: Irritating to eyes and skin.  
 Sensitizing. - R 43: May cause sensitisation by skin contact.  
 N, Dangerous for the environment - R 51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**2.2 Label elements**

The product is classified and required to be labelled in accordance with EC-Directives

**Labelling according to Regulation (EC) 1272/2008****Hazard pictograms****Signal word**

WARNING

**Contains:**Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight  $\leq$  700)**Hazard statements**H319 Causes serious eye irritation.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H411 Toxic to aquatic life with long lasting effects.**Precautionary statements**P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P280 Wear protective gloves/eye protection/face protection.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P501 Dispose of contents/container to in accordance with local/regional/national/international regulation.**Special labelling**

EUH205 Contains epoxy constituents. May produce an allergic reaction.

**2.3 Other hazards****Human health dangers**

Irritant gases/vapours.

**Other hazards**

Further hazards were not determined with the current level of knowledge.

**SECTION 3: Composition / Information on ingredients****Product-type:**

The product is a mixture.

Range [%]	Substance
80 - < 100	Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight $\leq$ 700)
	CAS: 25068-38-6, EINECS/ELINCS: 500-033-5, EU-INDEX: 603-074-00-8
	GHS/CLP: Eye Irrit. 2: H319 - Skin Irrit. 2: H315 - Skin Sens. 1: H317 - Aquatic Chronic 2: H411
	EEC: Xi-N, R 36/38-43-51/53

**Comment on component parts**Substances of Very High Concern - SVHC: substances are not contained or are below 0,1%.  
For full text of H-statements and R-phrases: see SECTION 16.**SECTION 4: First aid measures****4.1 Description of first aid measures****General information**

Change soaked clothing immediately.

**Inhalation**Remove the victim into fresh air and keep him calm.  
In the event of symptoms seek for medical treatment.**Skin contact**When in contact with the skin, clean with soap and water.  
Consult a doctor if skin irritation persists.**Eye contact**Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.**Ingestion**Consult a doctor immediately.  
Do not induce vomiting.  
Rinse out mouth and give plenty of water to drink.**4.2 Most important symptoms and effects, both acute and delayed**

No information available.

**4.3 Indication of any immediate medical attention and special treatment needed**Treat symptomatically.  
Forward this sheet to the doctor.



## SECTION 5: Fire-fighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** foam, dry powder, water spray jet, carbon dioxide

**Extinguishing media that must not be used** Full water jet

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

Risk of formation of toxic pyrolysis products.

### 5.3 Advice for firefighters

Use self-contained breathing apparatus.

Wear full protective suit.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

## SECTION 6: Accidental release measures

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

Ensure adequate ventilation.

Use personal protective clothing.

### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

In case the product spills into drains/surface waters/groundwater, immediately inform the authorities.

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

Take up with absorbent material (e.g. general-purpose binder).

Dispose of absorbed material in accordance with the regulations.

### 6.4 Reference to other sections

See SECTION 8+13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Use only in well-ventilated areas.

Avoid spilling or spraying in enclosed areas.

Keep away from all sources of ignition - Refrain from smoking.

Do not eat, drink or smoke when using this product.

Wash hands before breaks and after work.

Use barrier skin cream.

Contaminated work clothing should not be allowed out of the workplace.

Take off contaminated clothing and wash before reuse.

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

Keep only in original container.

Do not store together with food.

Do not store together with acids.

Do not store together with oxidizing agents.

Keep container tightly closed.

Keep container in a well-ventilated place.

Protect from heat/overheating.

### 7.3 Specific end use(s)

See product use, SECTION 1.2

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

Ingredients with occupational exposure limits to be monitored (GB)

**8.1 Control parameters**

not applicable

**8.2 Exposure controls****Additional advice on system design** Ensure adequate ventilation on workstation.**Eye protection** safety glasses**Hand protection** The details concerned are recommendations. Please contact the glove supplier for further information.In full contact:  
Butyl rubber, >480 min (EN 374).In splash contact  
butyl rubber, > 120 min (EN 374)**Skin protection** light protective clothing**Other** Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of these equipments to chemicals should be ascertained with the respective supplier.Do not breathe vapour/spray.  
Avoid contact with eyes and skin.**Respiratory protection** Breathing apparatus in the event of aerosol or mist formation.  
Short term: filter apparatus, combination filter A-P1.**Thermal hazards** No information available.**Delimitation and monitoring of the environmental exposition** See SECTION 6+7.**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

<b>Form</b>	viscous
<b>Color</b>	colourless light yellow
<b>Odor</b>	mild
<b>Odour threshold</b>	not determined
<b>pH-value</b>	not determined
<b>pH-value [1%]</b>	not determined
<b>Boiling point [°C]</b>	not determined
<b>Flash point [°C]</b>	> 250
<b>Flammability [°C]</b>	not determined
<b>Lower explosion limit</b>	not determined
<b>Upper explosion limit</b>	not determined
<b>Oxidizing properties</b>	not determined
<b>Vapour pressure/gas pressure [kPa]</b>	not determined
<b>Density [g/ml]</b>	1,0 - 1,2
<b>Bulk density [kg/m<sup>3</sup>]</b>	not applicable
<b>Solubility in water</b>	insoluble
<b>Partition coefficient [n-octanol/water]</b>	not determined
<b>Viscosity</b>	8000 - 16000 mPas (25°C)
<b>Relative vapour density determined in air</b>	not determined
<b>Evaporation speed</b>	not determined
<b>Melting point [°C]</b>	not determined
<b>Autoignition temperature [°C]</b>	not determined
<b>Decomposition temperature [°C]</b>	> 300

**9.2 Other information**

No information available.

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

See SECTION 10.3.

**10.2 Chemical stability**

Stable under normal ambient conditions (ambient temperature).

**10.3 Possibility of hazardous reactions**

Reactions with amines.

Reactions with acids.

Reactions with alkalies (lyes).

**10.4 Conditions to avoid**

See SECTION 7.2.

**10.5 Incompatible materials**

No information available.

**10.6 Hazardous decomposition products**

No hazardous decomposition products known.

**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity**

Range [%]	Substance
80 - < 100	Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight $\leq$ 700), CAS: 25068-38-6
	LD50, dermal, Rabbit: > 2000 mg/kg (Lit.).
	LD50, oral, Rat: 13600 mg/kg (Lit.).
	LC50, inhalative, > 100 mg/l (Lit.).

**Serious eye damage/irritation** not determined**Skin corrosion/irritation** not determined**Respiratory or skin sensitisation** not determined**Specific target organ toxicity — single exposure** not determined**Specific target organ toxicity — repeated exposure** not determined**Mutagenicity** not determined**Reproduction toxicity** not determined**Carcinogenicity** not determined**General remarks**

Toxicological data of complete product are not available.

The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists.

**SECTION 12: Ecological information****12.1 Toxicity**

Range [%]	Substance
80 - < 100	Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700), CAS: 25068-38-6
	LC50, (96h), <i>Leuciscus idus</i> : 3,6 mg/l (Lit.).
	EC50, (48h), <i>Daphnia magna</i> : 2,8 mg/l (Lit.).
	EC50, (96h), Algae: 220 mg/l (Lit.).

**12.2 Persistence and degradability**

<b>Behaviour in environment compartments</b>	not determined
<b>Behaviour in sewage plant</b>	not determined
<b>Biological degradability</b>	not determined

**12.3 Bioaccumulative potential**

No information available.

**12.4 Mobility in soil**

No information available.

**12.5 Results of PBT and vPvB assessment**

No information available.

**12.6 Other adverse effects**

Ecotoxicological data are not available.  
Do not discharge product unmonitored into the environment.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

**Product**

Dispose of as hazardous waste.

**Waste no. (recommended)**

080409\*

**Contaminated packaging**

Uncontaminated packaging may be taken for recycling.  
Packaging that cannot be cleaned should be disposed of as for product.

**Waste no. (recommended)**

150110\*

**SECTION 14: Transport information****14.1 UN number**

See SECTION 14.2 in accordance with UN shipping name

**14.2 UN proper shipping name**

Transport by land according to ADR/RID

UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A Epoxy resin) 9 III

- Classification Code

M6

- Label



- ADR LQ

5 I

- ADR 1.1.3.6 (8.6)

Transport category (tunnel restriction code) 3 (E)

Inland navigation (ADN)

UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A Epoxy resin) 9 III

- Classification Code

M6

- Label



Marine transport in accordance with IMDG

UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A Epoxy resin) 9 III  
MARINE POLLUTANT

- EMS

F-A, S-F

- Label



- IMDG LQ

5 I

Air transport in accordance with IATA

UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A Epoxy resin) 9 III

- Label

**14.3 Transport hazard class(es)**

See SECTION 14.2 in accordance with UN shipping name

**14.4 Packing group**

See SECTION 14.2 in accordance with UN shipping name

**14.5 Environmental hazards**

See SECTION 14.2 in accordance with UN shipping name

**14.6 Special precautions for user**

Relevant information under SECTION 6 to 8.

**14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

No information available.

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

EEC-REGULATIONS

1967/548 (1999/45); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (Reach); 1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC

TRANSPORT-REGULATIONS

DOT-Classification, ADR (2013); IMDG-Code (2013, 36. Amdt.); IATA-DGR (2013).

NATIONAL REGULATIONS (GB):

EH40/2005 Workplace exposure limits (Second edition, published December 2011).  
CHIP 3/ CHIP 4

- Observe employment restrictions for people

Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.

- VOC (1999/13/CE)

not applicable

**15.2 Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information****16.1 R-phrases (SECTION 3)**

R 36/38: Irritating to eyes and skin.  
 R 43: May cause sensitisation by skin contact.  
 R 51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**16.2 Hazard statements (SECTION 3)**

H411 Toxic to aquatic life with long lasting effects.  
 H317 May cause an allergic skin reaction.  
 H315 Causes skin irritation.  
 H319 Causes serious eye irritation.

**16.3 Abbreviations and acronyms:**

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route  
 RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses  
 ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure  
 CAS = Chemical Abstracts Service  
 CLP = Classification, Labelling and Packaging  
 DMEL = Derived Minimum Effect Level  
 DNEL = Derived No Effect Level  
 EC50 = Median effective concentration  
 ECB = European Chemicals Bureau  
 EEC = European Economic Community  
 EINECS = European Inventory of Existing Commercial Chemical Substances  
 ELINCS = European List of Notified Chemical Substances  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA = International Air Transport Association  
 IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
 IC50 = Inhibition concentration, 50%  
 IMDG = International Maritime Code for Dangerous Goods  
 IUCLID = International Uniform Chemical Information Database  
 LC50 = Lethal concentration, 50%  
 LD50 = Median lethal dose  
 MARPOL = International Convention for the Prevention of Marine Pollution from Ships  
 PBT = Persistent, Bioaccumulative and Toxic substance  
 PNEC = Predicted No-Effect Concentration  
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals  
 TLV@/TWA = Threshold limit value – time-weighted average  
 TLV@STEL = Threshold limit value – short-time exposure limit  
 VOC = Volatile Organic Compounds  
 vPvB = very Persistent and very Bioaccumulative

**16.4 Other information****Customs Tariff**

not determined

**Classification procedure**

Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)  
 Skin Irrit. 2: H315 Causes skin irritation. (Calculation method)  
 Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)  
 Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects. (Calculation method)

**Modified position**

none

Copyright: Chemiebüro®



**SECTION 1: Identification of the substance / preparation and of the company****1.1 Product identifier****MD-pox (Part B)  
Article number MPO****1.2 Relevant identified uses of the substance or mixture and uses advised against****1.2.1 Relevant uses**

Adhesive

**1.2.2 Uses advised against**

None known.

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

<b>Company</b>	Marston Domsel GmbH Bergheimer Str. 15 53909 Zülpich / GERMANY Phone 0 22 52 / 94 15 - 0 Fax 0 22 52 / 17 44 Homepage <a href="http://www.marston-domsel.de">www.marston-domsel.de</a> E-mail <a href="mailto:info@marston-domsel.de">info@marston-domsel.de</a>
----------------	--

**Address enquiries to**

<b>Technical information</b>	<a href="mailto:info@marston-domsel.de">info@marston-domsel.de</a>
<b>Safety Data Sheet</b>	<a href="mailto:sdb@chemiebuero.de">sdb@chemiebuero.de</a>

**1.4 Emergency phone**

<b>Advisory body</b>	+49 (0)89-19240 (24h) (english)
----------------------	---------------------------------

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]**

Skin Corr. 1B: H314 Causes severe skin burns and eye damage.  
Eye Dam. 1: H318 Causes serious eye damage.  
Skin Sens. 1: H317 May cause an allergic skin reaction.

**2.1.2 Classification according to Regulation 67/548/EEC or 1999/45/EC**

C, Corrosive - R 34: Causes burns.  
Sensitizing. - R 43: May cause sensitisation by skin contact.

**2.2 Label elements**

The product is classified and required to be labelled in accordance with EC-Directives

**Labelling according to Regulation (EC) 1272/2008****Hazard pictograms****Signal word**

DANGER

**Contains:**

Triethylenetetramine

**Hazard statements**

H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.

**Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P310 Immediately call a POISON CENTER/doctor/...  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P405 Store locked up.  
P501 Dispose of contents/container to in accordance with local/regional/national/international regulation.

**2.3 Other hazards**

**Environmental hazards** Does not contain any PBT or vPvB substances.  
**Other hazards** none

**SECTION 3: Composition / Information on ingredients****Product-type:**

The product is a mixture.

Range [%]	Substance
10 - 15	Triethylenetetramine CAS: 112-24-3, EINECS/ELINCS: 203-950-6, EU-INDEX: 612-059-00-5 GHS/CLP: Aquatic Chronic 3: H412 - Skin Sens. 1: H317 - Skin Corr. 1B: H314 - Acute Tox. 4: H312 EEC: C, R 21-34-43-52/53
1 - 5	2,4,6-Tris(dimethylaminomethyl)phenol CAS: 90-72-2, EINECS/ELINCS: 202-013-9, EU-INDEX: 603-069-00-0 GHS/CLP: Acute Tox. 4: H302 - Eye Irrit. 2: H319 - Skin Irrit. 2: H315 EEC: Xn, R 22-36/38
1 - 20	3-(Trimethoxysilyl)propylamine CAS: 13822-56-5, EINECS/ELINCS: 237-511-5 GHS/CLP: Eye Irrit. 2: H319 EEC: Xi, R 36

**Comment on component parts** Substances of Very High Concern - SVHC: substances are not contained or are below 0,1%.  
For full text of H-statements and R-phrases: see SECTION 16.

**SECTION 4: First aid measures****4.1 Description of first aid measures**

**General information** Change soaked clothing.

**Inhalation** Ensure supply of fresh air.  
In the event of symptoms seek for medical treatment.

**Skin contact** In case of contact with skin wash off immediately with soap and water.  
Consult a doctor if skin irritation persists.

**Eye contact** In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

**Ingestion** Supply with medical care.  
Do not induce vomiting.  
Rinse out mouth and give plenty of water to drink.

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

No information available.

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

Treat symptomatically.

**SECTION 5: Fire-fighting measures****5.1 Extinguishing media**

**Suitable extinguishing media** Product itself is non-combustible. Fire extinguishing method of surrounding areas must be considered.

**Extinguishing media that must not be used** Full water jet

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

Risk of formation of toxic pyrolysis products.

**5.3 Advice for firefighters**

Do not inhale explosion and/or combustion gases.  
Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

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

Ensure adequate ventilation.

**6.2 Environmental precautions**

Prevent spread over a wide area (e.g. by containment or oil barriers).  
Do not discharge into the drains/surface waters/groundwater.

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

Take up with absorbent material (e.g. general-purpose binder).  
Dispose of absorbed material in accordance with the regulations.

**6.4 Reference to other sections**

See SECTION 8+13

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

No special measures necessary if used correctly.

Do not eat, drink, smoke or take drugs at work.  
Wash hands before breaks and after work.  
Use barrier skin cream.

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

Keep only in original container.  
Do not store together with food.  
Do not store together with oxidizing agents.  
Do not store together with acids.  
Keep container in a well-ventilated place.  
Keep container tightly closed.  
Keep in a cool place.

**7.3 Specific end use(s)**

See product use, SECTION 1.2

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

Ingredients with occupational  
exposure limits to be monitored (GB)

not applicable

**8.2 Exposure controls**

<b>Additional advice on system design</b>	Ensure adequate ventilation on workstation.
<b>Eye protection</b>	Safety glasses.
<b>Hand protection</b>	The details concerned are recommendations. Please contact the glove supplier for further information. In full contact: Butyl rubber, >480 min (EN 374). In splash contact butyl rubber, > 120 min (EN 374)
<b>Skin protection</b>	not applicable
<b>Other</b>	Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of these equipments to chemicals should be ascertained with the respective supplier.
<b>Respiratory protection</b>	Breathing apparatus in the event of aerosol or mist formation. Short term: filter apparatus, combination filter A-P1.
<b>Thermal hazards</b>	not applicable
<b>Delimitation and monitoring of the environmental exposition</b>	See SECTION 6+7.

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

<b>Form</b>	viscous
<b>Color</b>	light yellow
<b>Odor</b>	characteristic
<b>Odour threshold</b>	not determined
<b>pH-value</b>	not applicable
<b>pH-value [1%]</b>	not applicable
<b>Boiling point [°C]</b>	not determined
<b>Flash point [°C]</b>	not applicable
<b>Flammability [°C]</b>	not determined
<b>Lower explosion limit</b>	not determined
<b>Upper explosion limit</b>	not determined
<b>Oxidizing properties</b>	no
<b>Vapour pressure/gas pressure [kPa]</b>	not determined
<b>Density [g/ml]</b>	1,0 - 1,2
<b>Bulk density [kg/m<sup>3</sup>]</b>	not applicable
<b>Solubility in water</b>	virtually insoluble
<b>Partition coefficient [n-octanol/water]</b>	not determined
<b>Viscosity</b>	8000 - 16000 cP (25°C)
<b>Relative vapour density determined in air</b>	not determined
<b>Evaporation speed</b>	not determined
<b>Melting point [°C]</b>	not determined
<b>Autoignition temperature [°C]</b>	not determined
<b>Decomposition temperature [°C]</b>	> 150

**9.2 Other information**

No information available.

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

See SECTION 10.3.

**10.2 Chemical stability**

Stable under normal ambient conditions (ambient temperature).

**10.3 Possibility of hazardous reactions**

Reactions with amines.  
Reactions with acids and strong oxidizing agents.  
Reactions with alkalies (lyes).

**10.4 Conditions to avoid**

See SECTION 7.2.  
Strong heating.

**10.5 Incompatible materials**

See SECTION 10.3.

**10.6 Hazardous decomposition products**

No hazardous decomposition products known.

**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity**

Range [%]	Substance
1 - 20	3-(Trimethoxysilyl)propylamine, CAS: 13822-56-5
	LD50, dermal, Rabbit: > 2000 mg/kg.
	LD50, oral, Rat: > 2000 mg/kg.
1 - 5	2,4,6-Tris(dimethylaminomethyl)phenol, CAS: 90-72-2
	LD50, dermal, Rabbit: 1280 mg/kg (IUCLID).
	LD50, oral, Rat: 1916-2455 mg/kg (IUCLID).
10 - 15	Triethylenetetramine, CAS: 112-24-3
	LD50, dermal, Rabbit: 805 mg/kg.
	LD50, oral, Rat: 2500 mg/kg.

**Serious eye damage/irritation** not determined

**Skin corrosion/irritation** not determined

**Respiratory or skin sensitisation** not determined

**Specific target organ toxicity — single exposure** not determined

**Specific target organ toxicity — repeated exposure** not determined

**Mutagenicity** not determined

**Reproduction toxicity** not determined

**Carcinogenicity** not determined

**General remarks** May cause irritation of eye and skin.  
Irritates the mucous membrane.

No classification on the basis of the calculation procedure of the preparation directive.

**SECTION 12: Ecological information****12.1 Toxicity**

Range [%]	Substance
1 - 20	3-(Trimethoxysilyl)propylamine, CAS: 13822-56-5
	LC50, (96h), fish: 1264 mg/l.
	EC50, (48h), Daphnia magna: 302 mg/l.
10 - 15	Triethylenetetramine, CAS: 112-24-3
	LC50, (96h), Poecilia reticulata: 570 mg/l (IUCLID).
	EC50, (48h), Daphnia magna: 31,1 mg/l (IUCLID).
	IC50, (72h), Algae: > 100 mg/l (IUCLID).
	LC0, (48h), Leuciscus idus: 200 mg/l (IUCLID).

**12.2 Persistence and degradability**

<b>Behaviour in environment compartments</b>	not determined
<b>Behaviour in sewage plant</b>	not determined
<b>Biological degradability</b>	The product is biodegradable.

**12.3 Bioaccumulative potential**

Product has having no bioaccumulation potential.

**12.4 Mobility in soil**

No information available.

**12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required or not conducted.

**12.6 Other adverse effects**

Ecotoxicological data are not available.

No classification on the basis of the calculation procedure of the preparation directive.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

**Product**

Dispose of as hazardous waste.

**Waste no. (recommended)**

080409\*

**Contaminated packaging**

Uncontaminated packaging may be taken for recycling.

Packaging that cannot be cleaned should be disposed of as for product.

**Waste no. (recommended)**

150110\*


**SECTION 14: Transport information****14.1 UN number**

See SECTION 14.2 in accordance with UN shipping name

**14.2 UN proper shipping name**

**Transport by land according to ADR/RID** UN 2259 Triethylentetramin, Lösung 8 II

- **Classification Code** C7

- **Label** 

- **ADR LQ** 1 I

- **ADR 1.1.3.6 (8.6)** Transport category (tunnel restriction code) 2 (E)


**Inland navigation (ADN)** UN 2259 Triethylentetramin, Lösung 8 II

- **Classification Code** C7

- **Label** 

**Marine transport in accordance with IMDG** UN 2259 Triethylene Tetramine, solution 8 II

- **EMS** F-A, S-B

- **Label** 

- **IMDG LQ** 1 I

**Air transport in accordance with IATA** UN 2259 Triethylene Tetramine, solution 8 II

- **Label** 

**14.3 Transport hazard class(es)**

See SECTION 14.2 in accordance with UN shipping name

**14.4 Packing group**

See SECTION 14.2 in accordance with UN shipping name

**14.5 Environmental hazards**

See SECTION 14.2 in accordance with UN shipping name

**14.6 Special precautions for user**

Relevant information under SECTION 6 to 8.

**14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

No information available.

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

**EEC-REGULATIONS** 1967/548 (1999/45); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (Reach); 1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC

**TRANSPORT-REGULATIONS** DOT-Classification, ADR (2013); IMDG-Code (2013, 36. Amdt.); IATA-DGR (2013).

**NATIONAL REGULATIONS (GB):** EH40/2005 Workplace exposure limits (Second edition, published December 2011). CHIP 3/ CHIP 4

- **Observe employment restrictions for people** Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.

- **VOC (1999/13/CE)** not applicable

**15.2 Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information****16.1 R-phrases (SECTION 3)**

R 21: Harmful in contact with skin.  
 R 34: Causes burns.  
 R 43: May cause sensitisation by skin contact.  
 R 52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 R 36: Irritating to eyes.  
 R 22: Harmful if swallowed.  
 R 36/38: Irritating to eyes and skin.

**16.2 Hazard statements (SECTION 3)**

H315 Causes skin irritation.  
 H302 Harmful if swallowed.  
 H319 Causes serious eye irritation.  
 H312 Harmful in contact with skin.  
 H314 Causes severe skin burns and eye damage.  
 H317 May cause an allergic skin reaction.  
 H412 Harmful to aquatic life with long lasting effects.

**16.3 Abbreviations and acronyms:**

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route  
 RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses  
 ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure  
 CAS = Chemical Abstracts Service  
 CLP = Classification, Labelling and Packaging  
 DMEL = Derived Minimum Effect Level  
 DNEL = Derived No Effect Level  
 EC50 = Median effective concentration  
 ECB = European Chemicals Bureau  
 EEC = European Economic Community  
 EINECS = European Inventory of Existing Commercial Chemical Substances  
 ELINCS = European List of Notified Chemical Substances  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA = International Air Transport Association  
 IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
 IC50 = Inhibition concentration, 50%  
 IMDG = International Maritime Code for Dangerous Goods  
 IUCLID = International Uniform Chemical Information Database  
 LC50 = Lethal concentration, 50%  
 LD50 = Median lethal dose  
 MARPOL = International Convention for the Prevention of Marine Pollution from Ships  
 PBT = Persistent, Bioaccumulative and Toxic substance  
 PNEC = Predicted No-Effect Concentration  
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals  
 TLV@TWA = Threshold limit value – time-weighted average  
 TLV@STEL = Threshold limit value – short-time exposure limit  
 VOC = Volatile Organic Compounds  
 vPvB = very Persistent and very Bioaccumulative

**16.4 Other information****Customs Tariff**

not determined

**Classification procedure**

Skin Corr. 1B: H314 Causes severe skin burns and eye damage. (Calculation method)  
 Eye Dam. 1: H318 Causes serious eye damage. (Calculation method)  
 Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)

**Modified position**

none

Copyright: Chemiebüro®