Printing date 15.02.2011 Revision: 15.05.2009

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

- · Product identifier
- · Trade name: Alocit 28.15 Komponente A
- · Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the preparation

Epoxy resin
Epoxy coating

- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

Alocit Chemie GmbH

Hansegartenstr. 4

D-78464 Konstanz

+49-(0)-7531-51704

· Further information obtainable from:

Mister Bratz

lothar.bratz@alocit.de

· Emergency telephone number: +49-(0)-7531-51704

### 2 Hazards identification

- · Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS08 health hazard

Muta. 2 H341 Suspected of causing genetic defects.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xn; Harmful

R68: Possible risk of irreversible effects.



Xi; Irritant

R36/38: Irritating to eyes and skin.



Xi; Sensitising

R43: May cause sensitisation by skin contact.



N; Dangerous for the environment

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

(Contd. on page 2)

Printing date 15.02.2011 Revision: 15.05.2009

Trade name: Alocit 28.15 Komponente A

#### · Classification system:

(Contd. of page 1)

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

#### · Label elements

#### · Hazard-determining components of labelling:

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

2,3-epoxypropyl o-tolyl ether

reaction product: bisphenol-F-(epichlorhydrin)epoxy resin (number average) molecular weight ≤ 700

## · Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

#### · Code letter and hazard designation of product:

Xn Harmful

N Dangerous for the environment

#### · Hazard-determining components of labelling:

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq$  700)

2,3-epoxypropyl o-tolyl ether

reaction product: bisphenol-F-(epichlorhydrin)epoxy resin (number average) molecular weight ≤ 700

#### · Risk phrases:

36/38 Irritating to eyes and skin.

- 43 May cause sensitisation by skin contact.
- 68 Possible risk of irreversible effects.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### · Safety phrases:

- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 28 After contact with skin, wash immediately with plenty of soap and water.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

Avoid release to the environment. Refer to special instructions/safety data sheets.

#### · Special labelling of certain preparations:

Contains epoxy constituents. See information supplied by the manufacturer.

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

### 3 Composition/information on ingredients

· Description: Mixture of substances listed below with nonhazardous additions.

#### · Dangerous components:

CAS: 25068-38-6 NLP: 500-033-5 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq$  700)

🗙 Xi R36/38; 🗙 Xi R43; 🝢 N R51/53

Aquatic Chronic 2, H411; 🕩 Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317

(Contd. on page 3)

5-30%

Printing date 15.02.2011 Revision: 15.05.2009

Trade name: Alocit 28.15 Komponente A

	(Cont	d. of page 2)
CAS: 9003-36-5	reaction product: bisphenol-F-(epichlorhydrin)epoxy resin (number average) molecular weight ≤ 700  Xi R38; Xi R43; N R51/53  Aquatic Chronic 2, H411; ♦ Skin Irrit. 2, H315; Skin Sens. 1, H317	2.5-15%
CAS: 2210-79-9 EINECS: 218-645-3	2,3-epoxypropyl o-tolyl ether  Xn R68; Xi R38; Xi R43; N R51/53  Muta. 2, H341; Aquatic Chronic 2, H411; ♦ Skin Irrit. 2, H315; Skin Sens. 1, H317	2.5-5%

<sup>·</sup> Additional information: For the wording of the listed risk phrases refer to section 16.

### 4 First aid measures

- · Description of first aid measures
- · After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing: If symptoms persist consult doctor.

### 5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.
- · Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Collect contaminated fire fighting water separately. It must not enter the sewage system.

#### 6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and storage

- · Handling:
- · Precautions for safe handling Keep receptacles tightly sealed.
- · Information about fire and explosion protection: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.

(Contd. on page 4)

Printing date 15.02.2011 Revision: 15.05.2009

Trade name: Alocit 28.15 Komponente A

(Contd. of page 3)

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep container tightly sealed.

### 8 Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · Control parameters
- Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- · Respiratory protection: Not necessary if room is well-ventilated.
- · Protection of hands:

Use gloves of stable material (e.g. Nitrile) - if necessary tricoted to improve the wearability.



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Butyl rubber, BR

Nitrile rubber, NBR

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

## 9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Fluid

Colour: Different according to colouring

· Odour: Weak, characteristic

· Change in condition

Melting point/Melting range: Undetermined. Boiling point/Boiling range: Undetermined.

(Contd. on page 5)

Printing date 15.02.2011 Revision: 15.05.2009

Trade name: Alocit 28.15 Komponente A

		(Contd. of page 4)
· Flash point:	> 126℃ (DIN 51755-2)	
· Self-igniting:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Density at 23℃:	1.86 g/cm³ (DIN 53217)	
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.	
· Viscosity: Dynamic at 23℃:	3750 mPas (DIN 53015)	

## 10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

Possibility of hazardous reactions

Exothermic polymerization.

Reacts with alcohols, amines, aqueous acids and alkalis.

· Hazardous decomposition products: Irritant gases/vapours

## 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

LD/LC50	values	relevant for	r classification:

25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq$  700)

Oral	LD50	> 10000 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rat)

9003-36-5 reaction product: bisphenol-F-(epichlorhydrin)epoxy resin (number average) molecular weight ≤ 700

Oral	LD50	23800 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

· Sensitisation May cause sensitisation by skin contact.

GF

Printing date 15.02.2011 Revision: 15.05.2009

Trade name: Alocit 28.15 Komponente A

(Contd. of page 5)

# 12 Ecological information

· Toxicity

· Acquatic toxicity:

25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

EC50/48 h 2.8 mg/l (daphnia)

EC50/96 h | 220 mg/l (Grünalge (Desmodesmus subspicatus))

9003-36-5 reaction product: bisphenol-F-(epichlorhydrin)epoxy resin (number average) molecular weight ≤ 700

EC50/96 h 1 - 10 mg/l (Grünalge (Desmodesmus subspicatus))

LC50/96 h 1 - 10 mg/l (Leuciscus idus)

2210-79-9 2,3-epoxypropyl o-tolyl ether

EC50/48 h | 3.3 mg/l (daphnia)

- Ecotoxical effects:
- · Remark: Toxic for fish
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

# 13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue

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

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

### 14 Transport information

· Land transport ADR/RID (cross-border)



· ADR/RID class: 9 Miscellaneous dangerous substances and articles.

Danger code (Kemler): 90
UN-Number: 3082
Packaging group: |||
Hazard label: 9

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Trade name: Alocit 28.15 Komponente A

(Contd. of page 6)

· **Special marking:** Symbol (fish and tree)

· UN proper shipping name: 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin

(number average molecular weight ≤ 700))

Tunnel restriction code E

· Maritime transport IMDG:



· IMDG Class: 9
 · UN Number: 3082
 · Label 9
 · Packaging group: |||
 · EMS Number: F-A,S-F
 · Marine pollutant: Yes

Symbol (fish and tree)

· Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number

average molecular weight ≤ 700))

· Air transport ICAO-TI and IATA-DGR:



· ICAO/IATA Class: 9
 · UN/ID Number: 3082
 · Label 9

· **Special marking:** Symbol (fish and tree)

· Packaging group: |||

· Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number

average molecular weight ≤ 700))

· UN "Model Regulation":

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III

· Special precautions for user Warning: Miscellaneous dangerous substances and articles.

### 15 Regulatory information

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H341 Suspected of causing genetic defects.

H411 Toxic to aquatic life with long lasting effects.

R36/38 Irritating to eyes and skin.

R38 Irritating to skin.

(Contd. on page 8)

(Contd. of page 7)

# Safety data sheet according to 1907/2006/EC, Article 31

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Trade name: Alocit 28.15 Komponente A

R43 May cause sensitisation by skin contact.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R68 Possible risk of irreversible effects.

- · Department issuing MSDS: department product safety
- · Contact: Mr. Bratz
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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

ICAO: International Civil Aviation Organization

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

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

- GE

Printing date 15.02.2011 Revision: 15.02.2011

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

- · Product identifier
- · Trade name: Alocit 2815 Komponente B
- · Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the preparation

Epoxy coating

Hardening agent/ Curing agent

- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

Alocit Chemie GmbH

Hansegartenstr. 4

D-78464 Konstanz

+49-(0)-7531-51704

· Further information obtainable from:

Mister Bratz

lothar.bratz@alocit.de

· Emergency telephone number: +49-(0)-7531-51704

### 2 Hazards identification

- · Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aguatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



C; Corrosive

R34: Causes burns.



Xn; Harmful

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.



Xi; Sensitising

R43: May cause sensitisation by skin contact.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- · Label elements
- · Hazard-determining components of labelling:

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Benzyl alcohol

trimethylhexane-1,6-diamine

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Trade name: Alocit 2815 Komponente B

Salicylic acid

(Contd. of page 1)

# · Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

#### · Code letter and hazard designation of product:

C Corrosive

### · Hazard-determining components of labelling:

Benzvl alcohol

3-aminomethyl-3,5,5-trimethylcyclohexylamine

trimethylhexane-1,6-diamine

#### · Risk phrases:

20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

- 34 Causes burns.
- 43 May cause sensitisation by skin contact.
- 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### · Safety phrases:

- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 28 After contact with skin, wash immediately with plenty of soap and water.
- 29 Do not empty into drains.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB:** Not applicable.

## 3 Composition/information on ingredients

· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
EINECS: 202-859-9	Benzyl alcohol  Xn R20/22; Xi R36   ↑ Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2, H319	20-40%
EINECS: 220-666-8	3-aminomethyl-3,5,5-trimethylcyclohexylamine C R34; Xn R21/22; Xi R43 R52/53 Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	20-40%
EINECS: 247-134-8	trimethylhexane-1,6-diamine C R34; Xn R22; Xi R43 R52/53 ♦ Skin Corr. 1B, H314; ♦ Acute Tox. 4, H302; Skin Sens. 1, H317; Aquatic Chronic 3, H412	3-25%
EINECS: 200-712-3	Salicylic acid  Xn R22;  Xi R37/38-41	1-5%

· Additional information: For the wording of the listed risk phrases refer to section 16.

- GF

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Trade name: Alocit 2815 Komponente B

(Contd. of page 2)

## 4 First aid measures

- · Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing:

Call for a doctor immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

## 5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

#### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

# 7 Handling and storage

- · Handling:
- · Precautions for safe handling

Store in cool, dry place in tightly closed receptacles.

Ensure good ventilation/exhaustion at the workplace.

- · Information about fire and explosion protection: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.

(Contd. on page 4)

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Trade name: Alocit 2815 Komponente B

(Contd. of page 3)

· Further information about storage conditions: Keep container tightly sealed.

### 8 Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- · Respiratory protection: Not necessary if room is well-ventilated.
- Protection of hands:

Use gloves of stable material (e.g. Nitrile) - if necessary tricoted to improve the wearability.



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- · Material of gloves Butyl rubber, BR
- · Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

### 9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Fluid
Colour: Yellowish
Odour: Amine-like

Change in condition

Melting point/Melting range: Undetermined. Boiling point/Boiling range: Undetermined.

• Flash point: > 100℃ (DIN 51755-2)

· Ignition temperature: 435℃

(Contd. on page 5)

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Trade name: Alocit 2815 Komponente B

		(Contd. of page 4)
· Self-igniting:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Density at 23℃:	1.02 g/cm³ (DIN 53217)	
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.	
· Viscosity: Dynamic at 23℃:	1350 mPas (DIN 53015)	

## 10 Stability and reactivity

- · Reactivity
- · Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- · Possibility of hazardous reactions Reacts with acids, alkalis and oxidizing agents.
- · Hazardous decomposition products: Irritant gases/vapours

## 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

rioute terriory.			
· LD/LC50 values relevant for classification:			
		zyl alcohol	
Oral	LD50	1230 mg/kg (rat)	
Dermal	LD50	2000 mg/kg (rabbit)	
25620-58-0 trimethylhexane-1,6-diamine			
Oral	LD50	900 mg/kg (rat)	

- · Primary irritant effect:
- · on the skin: Caustic effect on skin and mucous membranes.
- · on the eye: Strong caustic effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

· Sensitisation May cause sensitisation by skin contact.

# 12 Ecological information

- · Toxicity
- · Acquatic toxicity: No further relevant information available.
- Ecotoxical effects:
- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system.

(Contd. on page 6)

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Trade name: Alocit 2815 Komponente B

(Contd. of page 5)

Must not reach sewage water or drainage ditch undiluted or unneutralized. Danger to drinking water if even small quantities leak into the ground. Harmful to aquatic organisms

- · Results of PBT and vPvB assessment
- PBT: Not applicable.vPvB: Not applicable.

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue

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

- · Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

### 14 Transport information

· Land transport ADR/RID (cross-border)



· ADR/RID class: 8 Corrosive substances.

Danger code (Kemler): 80
UN-Number: 2735
Packaging group: |||
Hazard label: 8

· UN proper shipping name: 2735 AMINES, LIQUID, CORROSIVE, N.O.S.

(ISOPHORONEDIAMINE)

Tunnel restriction code E

· Maritime transport IMDG:



IMDG Class: 8
UN Number: 2735
Label 8
Packaging group: III
EMS Number: F-A,S-B
Marine pollutant: No
Segregation groups Alkalis

· Proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONEDIAMINE)

(Contd. on page 7)

Printing date 15.02.2011 Revision: 15.02.2011

Trade name: Alocit 2815 Komponente B

(Contd. of page 6)

#### · Air transport ICAO-TI and IATA-DGR:



· ICAO/IATA Class: 8
 · UN/ID Number: 2735
 · Label 8
 · Packaging group: | | | | | |

· Proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONEDIAMINE)

- · UN "Model Regulation": UN2735, AMINES, LIQUID, CORROSIVE, N.O.S., 8, III
- · Special precautions for user Warning: Corrosive substances.

## 15 Regulatory information

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Relevant phrases
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H412 Harmful to aquatic life with long lasting effects.
- R20/22 Harmful by inhalation and if swallowed.

R21/22 Harmful in contact with skin and if swallowed.

- R22 Harmful if swallowed.
- R34 Causes burns.
- R36 Irritating to eyes.
- R37/38 Irritating to respiratory system and skin.
- R41 Risk of serious damage to eyes.
- R43 May cause sensitisation by skin contact.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- · Department issuing MSDS: department product safety
- · Contact: Mr. Bratz
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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

ICAO: International Civil Aviation Organization

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

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent