

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****MD-mix Stahl/Metall, Alu, Wasser, Kupfer
Article number: MIX****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

Company	Marston Domsel GmbH Bergheimer Str. 15 53909 Zülpich / GERMANY Phone +49 (0) 22 52 94 15 0 Fax +49 (0) 22 52 17 44 Homepage www.marston-domsel.de E-mail info@marston-domsel.de
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Address enquiries to**Technical information** info@marston-domsel.de**Safety Data Sheet** sdb@chemiebuero.de**1.4 Emergency telephone number****Advisory body** +49 (0)89-19240 (24h) (English)**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]**

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

2.2 Label elements

The product is required to be labelled in accordance with regulation (EC) No 1272/2008 (CLP).

Hazard pictograms**Signal word**

WARNING

Contains:

Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700)

3-[3-(3-hydroxypropoxy)-2,2-bis[(3-hydroxypropoxy)methyl]propoxy]propan-1-ol; 3-sulfanylpropane-1,2-diol

Hazard statements

H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H317 May cause an allergic skin reaction.
 H412 Harmful 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.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337+P313 If eye irritation persists: Get medical advice / attention.
 P501 Dispose of contents/container in accordance with local/national regulation.

Special labelling

EUH205 Contains epoxy constituents. May produce an allergic reaction.

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

People who are allergic to epoxide should avoid the use of the product.

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
20 - 40	Talc (Mg ₃ H ₂ (SiO ₃) ₄) CAS: 14807-96-6, EINECS/ELINCS: 238-877-9
20 - 40	Calcium carbonate CAS: 471-34-1, EINECS/ELINCS: 207-439-9
10 - < 20	3-[3-(3-hydroxypropoxy)-2,2-bis[(3-hydroxypropoxy)methyl]propoxy]propan-1-ol; 3-sulfanylpropane-1,2-diol CAS: 72244-98-5, EINECS/ELINCS: 615-735-8, Reg-No.: 01-2120118957-46 GHS/CLP: Skin Sens. 1B: H317 - Aquatic Chronic 3: H412
10 - < 25	Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700) CAS: 25068-38-6, EINECS/ELINCS: 500-033-5, EU-INDEX: 603-074-00-8, Reg-No.: 01-2119456619-26-XXXX GHS/CLP: Skin Irrit. 2: H315 - Eye Irrit. 2: H319 - Skin Sens. 1: H317 - Aquatic Chronic 2: H411
< 5	2,4,6-Tris(dimethylaminomethyl)phenol CAS: 90-72-2, EINECS/ELINCS: 202-013-9, EU-INDEX: 603-069-00-0, Reg-No.: 01-2119560597-27 GHS/CLP: Acute Tox. 4: H302 - Skin Irrit. 2: H315 - Eye Irrit. 2: H319

Comment on component partsSubstances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.**SECTION 4: First aid measures****4.1 Description of first aid measures****General information**

Change soaked clothing.

InhalationEnsure supply of fresh air.
In the event of symptoms seek 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**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.

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects

4.3 Indication of any immediate medical attention and special treatment neededTreat symptomatically.
Forward this sheet to the doctor.**SECTION 5: Fire-fighting measures****5.1 Extinguishing media****Suitable extinguishing media**Water spray jet.
Dry powder.
Carbon dioxide.
Foam.**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.

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

High risk of slipping due to leakage/spillage of product.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

Take up mechanically.

Dispose of absorbed material in accordance within 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 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 oxidizing agents.

Keep container tightly closed.

Keep container in a well-ventilated place.

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)**

Substance
Talc (Mg ₃ H ₂ (SiO ₃) ₄)
CAS: 14807-96-6, EINECS/ELINCS: 238-877-9
Long-term exposure: 1 mg/m ³ , respirable dust
Calcium carbonate
CAS: 471-34-1, EINECS/ELINCS: 207-439-9
Long-term exposure: 10 mg/m ³ , inhalable dust
Titanium dioxide
CAS: 13463-67-7, EINECS/ELINCS: 236-675-5, Reg-No.: 01-2119489379-17-XXXX
Long-term exposure: 4 mg/m ³ , respirable; total inhalable: TWA=10 mg/m ³

DNEL

Substance
Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700), CAS: 25068-38-6
Industrial, dermal, Long-term - systemic effects: 8,33 mg/kg bw/d.
Industrial, inhalative, Long-term - systemic effects: 12,25 mg/m ³ .
Industrial, inhalative, Acute - systemic effects: 12,25 mg/m ³ .
Industrial, dermal, Acute - local effects: 8,33 mg/kg bw/d.
general population, oral, Acute - local effects: 0,75 mg/kg bw/d.
general population, oral, Long-term - systemic effects: 0,75 mg/kg bw/d.
general population, dermal, Long-term - systemic effects: 3,571 mg/kg bw/d.
general population, dermal, Acute - local effects: 3,571 mg/kg bw/d.
3-[3-(3-hydroxypropoxy)-2,2-bis[(3-hydroxypropoxy)methyl]propoxy]propan-1-ol; 3-sulfanylpropane-1,2-diol, CAS: 72244-98-5
Industrial, dermal, Long-term - systemic effects: 2.7 mg/kg bw/d (AF=90).
Industrial, inhalative, Long-term - systemic effects: 22 mg/m ³ (AF=6).
general population, inhalative, Long-term - systemic effects: 6.52 mg/m ³ (AF=10).
general population, dermal, Long-term - systemic effects: 1.61 mg/kg bw/d (AF=150).

PNEC

Substance
Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700), CAS: 25068-38-6
oral (food), 11 mg/kg.
seawater, 0,0006 mg/l.
sewage treatment plants (STP), 10 mg/l.
freshwater, 0,006 mg/l.
soil, 0,196 mg/l.
sediment (seawater), 0,0996 mg/l.
sediment (freshwater), 0,996 mg/l.
3-[3-(3-hydroxypropoxy)-2,2-bis[(3-hydroxypropoxy)methyl]propoxy]propan-1-ol; 3-sulfanylpropane-1,2-diol, CAS: 72244-98-5
sediment (seawater), 32 µg/kg dw.
sediment (freshwater), 322 µg/kg dw.
sewage treatment plants (STP), 10 mg/l (AF=100).
seawater, 7µg/l (AF=500).



freshwater, 70µg/l (AF=50).
soil, 23 µg/kg dw.
2,4,6-Tris(dimethylaminomethyl)phenol, CAS: 90-72-2
seawater, 0.008 mg/l (AF= 10 000).
sewage treatment plants (STP), 0.2 mg/l (AF= 10).
freshwater, 0.084 mg/l (AF= 1000).

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. In full contact: > 0,4 mm/ Butyl rubber, >480 min (EN 374-1/-2/-3). In splash contact: > 0,4 mm/ Nitrile rubber, >480 min (EN 374-1/-2/-3).
Skin protection	not applicable
Other	Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier. Do not inhale vapours. Avoid contact with eyes and skin.
Respiratory protection	not applicable
Thermal hazards	not applicable
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**

Form	pasty
Color	various
Odor	characteristic
Odour threshold	No information available.
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	No information available.
Flash point [°C]	> 100
Flammability (solid, gas) [°C]	No information available.
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	No information available.
Density [g/ml]	1.9 - 2.09
Bulk density [kg/m³]	not applicable
Solubility in water	immiscible
Partition coefficient [n-octanol/water]	No information available.
Viscosity	not applicable
Relative vapour density determined in air	No information available.
Evaporation speed	No information available.
Melting point [°C]	No information available.
Autoignition temperature [°C]	No information available.
Decomposition temperature [°C]	No information available.



9.2 Other information

none

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 oxidizing agents.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

See SECTION 7

10.6 Hazardous decomposition products

No hazardous decomposition products known.

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

Product
ATE-mix, dermal, > 2000 mg/kg bw.
ATE-mix, oral, > 2000 mg/kg bw.
Substance
Calcium carbonate, CAS: 471-34-1
LD50, oral, Rat: 6450 mg/kg bw (IUCLID).
LC0, inhalative, Rat: 0,0812 mg/L (90 min) (IUCLID).
Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700), CAS: 25068-38-6
LD50, dermal, Rabbit: 23000 mg/kg.
LD50, oral, Rat: > 15000 mg/kg.
LC50, inhalativ (mist), > 5,01 mg/l/4h.
3-[3-(3-hydroxypropoxy)-2,2-bis[(3-hydroxypropoxy)methyl]propoxy]propan-1-ol; 3-sulfanylpropane-1,2-diol, CAS: 72244-98-5
LD50, dermal, Rabbit: > 10 200 mg/kg bw.
LD50, oral, Rat: 2600 mg/kg bw.
LC50, inhalative, Rat: > 0.1 mg/l.

Serious eye damage/irritation	Toxicological data of complete product are not available. Irritant Calculation method
Skin corrosion/irritation	Toxicological data of complete product are not available. Irritant Calculation method
Respiratory or skin sensitisation	Toxicological data of complete product are not available. Sensitizing. Calculation method
Specific target organ toxicity — single exposure	Based on available data, the classification criteria are not met.
Specific target organ toxicity — repeated exposure	Based on available data, the classification criteria are not met.
Mutagenicity	Based on available data, the classification criteria are not met.
Reproduction toxicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.
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**

Substance
Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight \leq 700), CAS: 25068-38-6
LC50, (96h), Oncorhynchus mykiss: 2 mg/l.
EC50, (48h), Daphnia magna: 1,8 mg/l.
IC50, Bacteria: > 42,6 mg/l (18 h).
ErC50, (72h), Selenastrum capricornutum: 11 mg/l.
Talc (Mg ₃ H ₂ (SiO ₃) ₄), CAS: 14807-96-6
LC50, (24h), Brachidanio rerio: >100 mg/L (IUCLID).
3-[3-(3-hydroxypropoxy)-2,2-bis[(3-hydroxypropoxy)methyl]propoxy]propan-1-ol; 3-sulfanylpropane-1,2-diol, CAS: 72244-98-5
LC50, (96h), Danio rerio: 87 mg/l.
EC50, (21d), Daphnia magna: 3,5 mg/l.
EC50, (48h), Daphnia magna: 12 mg/l.
ErC50, (72h), Desmodosmus subspicatus: > 733 mg/l.

12.2 Persistence and degradability

Behaviour in environment compartments	not determined
Behaviour in sewage plant	not determined
Biological degradability	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

Do not discharge product unmonitored into the environment or into the drainage.

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

Waste material c 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.
Disposal in an incineration plant in accordance with the regulations of the local authorities.

Waste no. (recommended) 080409*

Contaminated packaging

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

Waste no. (recommended) 150110*

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

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

14.2 UN proper shipping name

Transport by land according to ADR/RID NO DANGEROUS GOODS

Inland navigation (ADN) NO DANGEROUS GOODS

Marine transport in accordance with IMDG NOT CLASSIFIED AS "DANGEROUS GOODS"

Air transport in accordance with IATA NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

14.4 Packing group

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

**14.5 Environmental hazards**

Transport by land according to ADR/RID no

Inland navigation (ADN) no

Marine transport in accordance with IMDG no

Air transport in accordance with IATA no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

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

not applicable

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

EEC-REGULATIONS 1991/689 (2001/118); 2010/75; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEC (2016/2037/EC); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014

TRANSPORT-REGULATIONS ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2019)

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

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

- **VOC (2010/75/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 Hazard statements (SECTION 03)**

H302 Harmful if swallowed.
 H412 Harmful to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H315 Causes skin irritation.

**16.2 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
 ATE = acute toxicity estimate
 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
 LC0 = lethal concentration, 0%
 LOAEL = lowest-observed-adverse-effect level
 MARPOL = International Convention for the Prevention of Marine Pollution from Ships
 NOAEL = No Observed Adverse Effect Level
 NOEC = No Observed Effect Concentration
 PBT = Persistent, Bioaccumulative and Toxic substance
 PNEC = Predicted No-Effect Concentration
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
 STP = Sewage Treatment Plant
 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

16.3 Other information

Customs Tariff	39073000
Classification procedure	Skin Irrit. 2: H315 Causes skin irritation. (Calculation method) Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method) Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method) Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects. (Calculation method)
Modified position	none

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