

SECTION 1: Identification of the substance / preparation and of the company**1.1 Product identifier****MD-mix Stahl/Metall + Aluminium****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 0 22 52 / 94 15 - 0
	Fax 0 22 52 / 17 44
	Homepage www.marston-domsel.de
	E-mail info@marston-domsel.de

Address enquiries to

Technical information	info@marston-domsel.de
Safety Data Sheet	sdb@chemiebuero.de

1.4 Emergency phone

Advisory body	+49 (0) 89-19240 (24h) (english)
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SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]**

see SECTION 16

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

Irritant

R-phrases

R 36/38: Irritating to eyes and skin.
 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.

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

2.2 Label elements**Labelling according to Regulation 67/548/EEC or 1999/45/EC****Hazard symbols**

Irritant

Contains:Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight \leq 700)**R-phrases**R 36/38: Irritating to eyes and skin.
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.**S-phrases**S 2: Keep out of the reach of children.
S 24/25: Avoid contact with skin and eyes.
S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 28.2: After contact with skin, wash immediately with plenty of water and soap.
S 37: Wear suitable gloves.
S 46: If swallowed, seek medical advice immediately and show this container or label.**Special labelling**

Contains epoxy-containing compounds. Observe manufacturer's instructions.

2.3 Other hazards**Other hazards**

none

SECTION 3: Composition / Information on ingredients**3.1 Product-type:**

The product is a mixture.

Range [%]	Substance
5 - < 25	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
1 - < 20	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 36/38-22

Comment on component partsSubstances of Very High Concern - SVHC: substances are not contained or are below 0,1%.
For the wording of the listed risk phrases refer to 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 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

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.

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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

Unknown 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 with 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 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.

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)

Range [%]	Substance
20 - < 40	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

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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 Nitrile rubber, >480 min (EN 374).
Skin protection	not applicable
Other	Do not inhale vapours. Avoid contact with eyes and skin. 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 eat, drink, smoke or take drugs at work. Wash hands before breaks and after work. Use barrier skin cream.
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	grey
Odor	characteristic
Odour threshold	not determined
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	not determined
Flash point [°C]	> 200
Flammability [°C]	not determined
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidizing properties	no
Vapour pressure/gas pressure [kPa]	not determined
Density [g/ml]	1,85
Bulk density [kg/m³]	not applicable
Solubility in water	virtually insoluble
Partition coefficient [n-octanol/water]	not determined
Viscosity	not applicable
Relative vapour density determined in air	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Autoignition temperature [°C]	not determined
Decomposition temperature	not determined

9.2 Other information

none

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

See SECTION 10.3.

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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

See SECTION 7

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**

Range [%]	Substance
1 - < 20	2,4,6-Tris(dimethylaminomethyl)phenol, CAS: 90-72-2
	LD50, oral, Rat: 1916-2455 mg/kg IUCLID.
	LD50, dermal, Rat: 1280 mg/kg IUCLID.
5 - < 25	Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700), CAS: 25068-38-6
	LD50, oral, Rat: 13600 mg/kg (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	

The product was classified on the basis of the calculation procedure of the preparation directive.

SECTION 12: Ecological information**12.1 Toxicity****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 informations available.

12.4 Mobility in soil

No informations available.

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12.5 Results of PBT and vPvB assessment

No informations available.

12.6 Other adverse effects

The product was classified 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.
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**

See SECTION14.2 in accordance with UN shipping name

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)

See SECTION14.2 in accordance with UN shipping name

14.4 Packing group

See SECTION14.2 in accordance with UN shipping name

14.5 Environmental hazards

See SECTION14.2 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

not applicable

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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 (2011); IMDG-Code (2011, 35. Amdt.); IATA-DGR (2012).
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits with amendments October 2007. CHIP 3/ CHIP 4

15.2 Chemical safety assessment

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

SECTION 16: Other informations**16.1 Classification according to Regulation (EC) No 1272/2008 [CLP]****Hazard pictograms****Signal word**

WARNING

Skin Sens. 1 - H315 Causes skin irritation.
 Aquatic Chronic 3 - H319 Causes serious eye irritation.
 Skin Irrit. 2 - H317 May cause an allergic skin reaction.
 Eye Irrit. 2 - H412 Harmful to aquatic life with long lasting effects.

Classification procedure

Classification according to conversion table Annex VII 1272/2008/EC

16.2 R-phrases (SECTION 03)

R 22: Harmful if swallowed.
 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.

16.3 Hazard statements (SECTION 03)

H302 Harmful if swallowed.
 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.

16.4 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	
Modified position	none

16.5 Other informations

Observe employment restrictions for people	yes
VOC (1999/13/CE)	not applicable
Customs Tariff	not determined