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

1.1 Product identifier

MD-Schraubensicherung 641-270
Article number: MSS.641

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

1.2.1 Relevant uses

Adhesive
Sealing material

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

Address enquiries to

Technical information info@marston-domsel.de

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

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.
STOT SE 3: H335 May cause respiratory irritation.
Aquatic Chronic 4: H413 May cause long lasting harmful effects to aquatic life.

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:

2-Hydroxyethyl methacrylate

2,2'-Ethylenedioxydiethyl dimethacrylate

Cumene hydroperoxide

2'-Phenylacetohydrazide

Hazard statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H413 May cause long lasting harmful effects to aquatic life.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves / eye protection / face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 If skin irritation or rash occurs: Get medical advice / attention.
P337+P313 If eye irritation persists: Get medical advice / attention.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/national regulation.

2.3 Other hazards

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

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
30 - 45	Bisphenol A ethoxylate dimethacrylate
	CAS: 41637-38-1, EINECS/ELINCS: Polymer, Reg-No.: 01-2119980659-17
	GHS/CLP: Aquatic Chronic 4: H413
30 - 45	2-Hydroxyethyl methacrylate
	CAS: 868-77-9, EINECS/ELINCS: 212-782-2, EU-INDEX: 607-124-00-X, Reg-No.: 01-2119490169-29
	GHS/CLP: Eye Irrit. 2: H319 - Skin Sens. 1: H317 - Skin Irrit. 2: H315
1 - 5	2,2'-Ethylenedioxydiethyl dimethacrylate
	CAS: 109-16-0, EINECS/ELINCS: 203-652-6, Reg-No.: 01-2119969287-21
	GHS/CLP: Skin Sens. 1: H317
≤ 1,5	Cumene hydroperoxide
	CAS: 80-15-9, EINECS/ELINCS: 201-254-7, EU-INDEX: 617-002-00-8
	GHS/CLP: Org. Perox. E: H242 - Acute Tox. 3: H331 - Acute Tox. 4: H302 H312 - STOT RE 2: H373 - Skin Corr. 1B: H314 - Aquatic Chronic 2: H411, M_acute = 1
0,1- <0,5	2'-Phenylacetohydrazide
	CAS: 114-83-0, EINECS/ELINCS: 204-055-3
	GHS/CLP: Acute Tox. 3: H301 - Skin Irrit. 2: H315 - Eye Irrit. 2: H319 - Skin Sens. 1: H317 - STOT SE 3: H335
0,01 - < 0,05	1,4-Dihydroxybenzene
	CAS: 123-31-9, EINECS/ELINCS: 204-617-8, EU-INDEX: 604-005-00-4
	GHS/CLP: Carc. 2: H351 - Muta. 2: H341 - Acute Tox. 4: H302 - Eye Dam. 1: H318 - Skin Sens. 1: H317 - Aquatic Acute 1: H400, M_acute = 10

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: 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.

Skin contact In case of contact with skin wash off immediately with plenty of 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 Get medical advice.
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

Nitrogen oxides (NOx).
Risk of formation of toxic pyrolysis products.
Carbon monoxide (CO)

5.3 Advice for firefighters

Use self-contained breathing apparatus.
Wear full protective suit.

Collect contaminated firefighting water separately, must not be discharged into the drains.
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

Ensure adequate ventilation.
Use personal protective clothing.

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 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

Use only in well-ventilated areas.
Open and handle container with care.

Keep away from sources of ignition - refrain from smoking.

Contaminated work clothing should not be allowed out of the workplace.
Do not eat, drink or smoke when using this product.
Wash hands before breaks and after work.
Use barrier skin cream.
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.
Do not store together with acids.

Keep container in a well-ventilated place.
Keep container tightly closed.
Store in a dry place.
Recommended storage temperature: < 25°C
Protect from sun.

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

DNEL

Substance
2-Hydroxyethyl methacrylate, CAS: 868-77-9
Industrial, dermal, Long-term - local effects: 1,3 mg/kg bw.
Industrial, inhalative, Long-term - systemic effects: 4,9 mg/m³.
Industrial, dermal, Long-term - systemic effects: 1,3 mg/kg bw.
Industrial, inhalative, Long-term - local effects: 4,9 mg/m³.
general population, inhalative, Long-term - systemic effects: 4,9 mg/m³.
general population, inhalative, Long-term - local effects: 4,9 mg/m³.
general population, dermal, Long-term - local effects: 1,3 mg/kg bw.
general population, dermal, Long-term - systemic effects: 1,3 mg/kg bw.
Bisphenol A ethoxylate dimethacrylate, CAS: 41637-38-1
Industrial, dermal, Long-term - systemic effects: 2 mg/kg bw/d (AF=300).
Industrial, inhalative, Long-term - systemic effects: 3.52 mg/m³ (AF=75).
general population, dermal, Long-term - systemic effects: 1 mg/kg bw/d (AF=600).
general population, inhalative, Long-term - systemic effects: 0.87 mg/m³ (AF=150).
general population, oral, Long-term - systemic effects: 0.5 mg/kg bw/d (AF=600).
2,2'-Ethylenedioxydiethyl dimethacrylate, CAS: 109-16-0
Industrial, inhalative, Long-term - systemic effects: 48.5 mg/m³ (AF=18).
Industrial, dermal, Long-term - systemic effects: 13.9 mg/kg bw/d (AF=72).
general population, oral, Long-term - systemic effects: 8.33 mg/kg bw/d (AF=120).
general population, dermal, Long-term - systemic effects: 8.33 mg/kg bw/d (AF=120).
general population, inhalative, Long-term - systemic effects: 14.5 mg/m³ (AF=69).

PNEC

Substance
2-Hydroxyethyl methacrylate, CAS: 868-77-9
sediment (freshwater), 3,79 mg/kg dw.
sewage treatment plants (STP), 10 mg/l.
soil, 0,476 mg/kg dw.
freshwater, 0,482 mg/l.
Bisphenol A ethoxylate dimethacrylate, CAS: 41637-38-1
There are no PNEC values established for the substance.,
2,2'-Ethylenedioxydiethyl dimethacrylate, CAS: 109-16-0
soil, 0.027 mg/kg dw.
sediment (seawater), 0.018 mg/kg dw.
sediment (freshwater), 0.185 mg/kg dw.
sewage treatment plants (STP), 1.7 mg/L (AF=10).
seawater, 0.002 mg/L (AF=10 000).
freshwater, 0.016 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: > 0,4mm/ Butyl rubber, >480 min (EN 374-1/-2/-3). In splash contact: > 0,4mm/ Nitrile rubber, >480 min (EN 374-1/-2/-3).
Skin protection	light protective clothing
Other	Avoid contact with eyes and skin. 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.
Respiratory protection	Breathing apparatus in the event of aerosol or mist formation. Short term: filter apparatus, filter A. (DIN EN 14387)
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	green
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]	ca. 1,1
Bulk density [kg/m³]	not applicable
Solubility in water	partially soluble
Partition coefficient [n-octanol/water]	No information available.
Viscosity	400 - 700 mPas (25°C)
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

Temperature resistance: -55 - 150 °C

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 strong oxidizing agents and strong acids.
Polymerization may occur at elevated temperature.

10.4 Conditions to avoid

See SECTION 7.2.
Strong heating.

10.5 Incompatible materials

Various metals.

10.6 Hazardous decomposition products

Irritant gases/vapours.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Substance
1,4-Dihydroxybenzene, CAS: 123-31-9
LD50, dermal, Rabbit: 2000 mg/kg.
LD50, oral, Rat: 375 mg/kg.
Cumene hydroperoxide, CAS: 80-15-9
LD50, oral, Rat: 382 mg/kg IUCLID.
LC50, inhalative, Rat: 220 ppm 4h IUCLID.
2'-Phenylacetohydrazide, CAS: 114-83-0
LD50, oral, mouse: 270 mg/kg bw (Lit.).
2-Hydroxyethyl methacrylate, CAS: 868-77-9
LD50, dermal, Rabbit: > 5000 mg/kg.
LD50, oral, Rat: > 5000 mg/kg.
Bisphenol A ethoxylate dimethacrylate, CAS: 41637-38-1
LD50, dermal, Rat: > 2000 mg/kg bw.
LD50, oral, Rat: > 2000 mg/kg bw.
2,2'-Ethylenedioxydiethyl dimethacrylate, CAS: 109-16-0
LD50, oral, Rat: 2000 - 5000 mg/kg bw.
LD50, dermal, mouse: > 2000 mg/kg bw.

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.
May cause an allergic skin reaction.
Calculation method

Specific target organ toxicity — single exposure
Toxicological data of complete product are not available.
May cause respiratory irritation.
Calculation method

Specific target organ toxicity — repeated exposure
Based on the available information, the classification criteria are not fulfilled.

Mutagenicity
Based on the available information, the classification criteria are not fulfilled.

Reproduction toxicity
Based on the available information, the classification criteria are not fulfilled.

Carcinogenicity
Based on the available information, the classification criteria are not fulfilled.

Aspiration hazard
Based on the available information, the classification criteria are not fulfilled.

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
1,4-Dihydroxybenzene, CAS: 123-31-9
LC50, (96h), fish: 638 µg/L.
EC50, (48h), Invertebrates: 61 - 134 µg/L.
EC50, (72h), Algae: 33 - 330 µg/L.
Cumene hydroperoxide, CAS: 80-15-9
LC50, (96h), Oncorhynchus mykiss: 3,9 mg/l.
EC50, (24h), Daphnia magna: 7 mg/l.
2-Hydroxyethyl methacrylate, CAS: 868-77-9
LC50, (96h), Oryzias latipes: > 100 mg/l (OECD 203).
EC50, (72h), Selenastrum capricornutum: 836 mg/l (OECD 201).
EC50, (48h), Daphnia magna: 380 mg/l (OECD 202).
NOEC, (21d), Daphnia magna: 24,1 mg/l (OECD 202).
NOEC, (72h), Selenastrum capricornutum: 400 mg/l (OECD 201).
Bisphenol A ethoxylate dimethacrylate, CAS: 41637-38-1
Log Kow: 5.30 - 5.62.
EL50, (72h), Pseudokirchneriella subcapitata: > 100 mg/L.
EL50, (48h), Daphnia magna: > 100 mg/L.
LL50, (96h), Brachidanio rerio: > 100 mg/L.
BCF, Log Koc. 3.69 - 3.88 (20°C).
2,2'-Ethylenedioxydiethyl dimethacrylate, CAS: 109-16-0
LC50, (96h), Brachidanio rerio: 16.4 mg/L.
EC50, (21d), Daphnia magna: 51.9 mg/L.
EC50, (72h), Pseudokirchneriella subcapitata: > 100 mg/L.

12.2 Persistence and degradability

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

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

Ecological data of complete product are not available.
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.

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* packaging containing residues of or contaminated by hazardous substances

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	2008/98/EC 2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2020)
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 3)

H400 Very toxic to aquatic life.
H318 Causes serious eye damage.
H302 Harmful if swallowed.
H341 Suspected of causing genetic defects.
H351 Suspected of causing cancer.
H413 May cause long lasting harmful effects to aquatic life.
H335 May cause respiratory irritation.
H301 Toxic if swallowed.
H411 Toxic to aquatic life with long lasting effects.
H314 Causes severe skin burns and eye damage.
H373 May cause damage to organs through prolonged or repeated exposure.
H302+H312 Harmful if swallowed or in contact with skin.
H331 Toxic if inhaled.
H242 Heating may cause a fire.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye 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
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
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
LL50 = Median lethal loading
LQ = Limited Quantities
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	not determined
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) STOT SE 3: H335 May cause respiratory irritation. (Calculation method) Aquatic Chronic 4: H413 May cause long lasting harmful effects to aquatic life. (Calculation method)
Modified position	none