

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****MD-Schraubensicherung 541-241**
Article number: MSS.541.241**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 |
|----------------|--|

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]**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.**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:2,2'-Ethylenedioxydiethyl dimethacrylate
Methacrylic acid, monoester with Propan-1,2-diole
Cumene hydroperoxide
2'-Phenylacetohydrazide**Hazard statements**H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.**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.
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.
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**Product-type:**

The product is a mixture.

| Range [%] | Substance |
|---------------|--|
| 40 - 55 | 2,2'-Ethylenedioxydiethyl dimethacrylate CAS: 109-16-0, EINECS/ELINCS: 203-652-6, Reg-No.: 01-2119969287-21 GHS/CLP: Skin Sens. 1: H317 |
| 20 - 35 | Methacrylic acid, monoester with Propan-1,2-diole CAS: 27813-02-1, EINECS/ELINCS: 248-666-3, Reg-No.: 01-2119490226-37-XXXX GHS/CLP: Eye Irrit. 2: H319 - Skin Sens. 1: H317 |
| ≤ 2 | 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 = 1 |
| 0,1 - < 0,25 | 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: Acute Tox. 4: H302 - Carc. 2: H351 - Eye Dam. 1: H318 - Skin Sens. 1: H317 - Muta. 2: H341 - Aquatic Acute 1: H400, M = 10 |

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

Take off contaminated clothing and wash before reuse.

Inhalation

Ensure supply of fresh air.

Skin contactIn 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**Get medical advice.
Rinse out mouth and give plenty of water to drink.

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects

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.
Carbon monoxide (CO)
Nitrogen oxides (NOx).

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 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

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 with the regulations.
Take up residues with absorbent material (e.g. sand).

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.
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 |
|---|
| Methacrylic acid, monoester with Propan-1,2-diole, CAS: 27813-02-1 |
| Industrial, dermal, Long-term - systemic effects: 4.2 mg/kg bw/d (AF=72). |
| Industrial, inhalative, Long-term - systemic effects: 14.7 mg/m ³ (AF=18). |
| general population, inhalative, Long-term - systemic effects: 8.8 mg/m ³ (AF=30). |
| general population, oral, Long-term - systemic effects: 2.5 mg/kg bw/d (AF=120). |
| general population, dermal, Long-term - systemic effects: 2.5 mg/kg bw/d (AF=120). |
| 2,2'-Ethylenedioxydiethyl dimethacrylate, CAS: 109-16-0 |
| Industrial, dermal, Long-term - systemic effects: 13.9 mg/kg bw/d (AF=72). |
| Industrial, inhalative, Long-term - systemic effects: 48.5 mg/m ³ (AF=18). |
| general population, oral, Long-term - systemic effects: 8.33 mg/kg bw/d (AF=120). |
| general population, inhalative, Long-term - systemic effects: 14.5 mg/m ³ (AF=69). |
| general population, dermal, Long-term - systemic effects: 8.33 mg/kg bw/d (AF=120). |

PNEC

| Substance |
|--|
| Methacrylic acid, monoester with Propan-1,2-diole, CAS: 27813-02-1 |
| soil, 0.727 mg/kg dw. |
| sediment (seaater), 6.28 mg/kg dw. |
| sediment (freshwater), 6.28 mg/kg dw. |
| sewage treatment plants (STP), 10 mg/L (AF=10). |
| seawater, 0.904 mg/L (AF=50). |
| freshwater, 0.904 mg/L (AF=50). |
| 2,2'-Ethylenedioxydiethyl dimethacrylate, CAS: 109-16-0 |
| soil, 0.027 mg/kg dw. |
| sediment (seaater), 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: Butyl rubber, >480 min (EN 374-1/-2/-3). In splash contact: Nitrile rubber, >480 min (EN 374-1/-2/-3). |
| Skin protection | Protective overalls. |
| 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 | blue |
| Odor | characteristic |
| Odour threshold | No information available. |
| pH-value | 3-4 |
| pH-value [1%] | No information available. |
| Boiling point [°C] | No information available. |
| Flash point [°C] | > 93 |
| Flammability (solid, gas) [°C] | No information available. |
| Lower explosion limit | No information available. |
| Upper explosion limit | No information available. |
| Oxidising properties | no |
| Vapour pressure/gas pressure [kPa] | No information available. |
| Density [g/ml] | 1,0-1,1 |
| Bulk density [kg/m³] | not applicable |
| Solubility in water | partially soluble |
| Partition coefficient [n-octanol/water] | No information available. |
| Viscosity | 100 - 150 cPs (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

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

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

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.
Nitrogen
Oxide of carbon (CO_x)

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

| |
|---|
| Product |
| inhalative, Based on the available information, the classification criteria are not fulfilled.: |
| dermal, Based on the available information, the classification criteria are not fulfilled.: |
| oral, Based on the available information, the classification criteria are not fulfilled.: |
| Substance |
| 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.). |
| Methacrylic acid, monoester with Propan-1,2-diole, CAS: 27813-02-1 |
| LD50, dermal, Rabbit: > 5000 mg/kg. |
| LD50, oral, Rat: > 2000 mg/kg (OECD 401). |
| 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 | Based on the available information, the classification criteria are not fulfilled. |
| 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 |
| Cumene hydroperoxide, CAS: 80-15-9 |
| LC50, (96h), Oncorhynchus mykiss: 3,9 mg/l. |
| EC50, (24h), Daphnia magna: 7 mg/l. |
| Methacrylic acid, monoester with Propan-1,2-diole, CAS: 27813-02-1 |
| LC50, (48h), Leuciscus idus: 493 mg/l (DIN 38412). |
| EC50, (72h), Pseudokirchneriella subcapitata: 97,2 mg/l (OECD 201). |
| EC50, (48h), Daphnia magna: 380 mg/l (OECD 202). |
| NOEC, (72h), Pseudokirchneriella subcapitata: 97,2 mg/l (OECD 201). |
| NOEC, (21d), Daphnia magna: 24,1 mg/l (OECD 202). |
| 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 | The product is not biodegradable. |

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

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

Untaminated 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**

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 (2008/47/EC); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014 |
| TRANSPORT-REGULATIONS | DOT-Classification, ADR (2017); IMDG-Code (2017, 38. Amdt.); IATA-DGR (2018). |
| 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 determined |

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)**

H400 Very toxic to aquatic life.
 H341 Suspected of causing genetic defects.
 H318 Causes serious eye damage.
 H351 Suspected of causing cancer.
 H302 Harmful if swallowed.
 H335 May cause respiratory irritation.
 H315 Causes skin 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.
 H319 Causes serious eye irritation.
 H317 May cause an allergic skin reaction.

**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**

not determined

Classification procedure

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)

Modified position

SECTION 3 been added: 1,4-Dihydroxybenzene
 SECTION 2 been added: P337+P313 If eye irritation persists: Get medical advice / attention.
 SECTION 2 been added: P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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