Safety Data Sheet

according to Regulation (EC) No 1907/2006



Telefax: +49 2154 922255

Revision date: 02.08.2018 Impact-Filler

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

1.1. Product identifier

Impact-Filler

Further trade names

Résine de fintion Resina de acabado

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

Use of the substance/mixture

Filler

1.3. Details of the supplier of the safety data sheet

Company name: PMA/TOOLS AG
Street: Siemensring 42
Place: D-47877 Willich
Telephone: +49 2154 922230

e-mail: info@pma-tools.de Contact person: Michael Münter

e-mail: msds@pma-tools.de - Please DO NOT use for requesting Safety Data Sheets.

Internet: www.pma-tools.de Responsible Department: Laboratory

1.4. Emergency telephone number: Telephone number of the company in case of emergencies:

+49 2154 922230 (Mon - Fri 8.00h - 17.00h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Dam. 1 Respiratory or skin sensitisation: Skin Sens. 1

Specific target organ toxicity - single exposure: STOT SE 3 Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:
Causes skin irritation.
Causes serious eye damage.
May cause an allergic skin reaction.
May cause respiratory irritation.

Toxic to aquatic life with long lasting effects.

2.2. Label elements

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard components for labelling

(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate

2-methylpropenoic acid, methacrylic acid

Signal word: Danger

Pictograms:







Hazard statements

H315 Causes skin irritation.

H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing vapour/ Gas.

P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.

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P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

| CAS No | Chemical name | | | | |
|------------|---------------------------------------------------------------------------------------------------|--------------|----------|------------|--|
| | EC No | Index No | REACH No | | |
| | Classification according to Regulation (EC) No. 1272/2008 [CLP] | | | | |
| 5888-33-5 | Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-ylacrylate | | | | |
| | 227-561-6 | | | | |
| | Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, Aquatic Chronic 2; H315 H319 H335 H411 | | | | |
| 42978-66-5 | (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate | | | 10 - 25 % | |
| | 256-032-2 | 607-249-00-X | | | |
| | Eye Irrit. 2, STOT SE 3, Skin Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H319 H335 H315 H317 H411 | | | | |
| 79-41-4 | 2-methylpropenoic acid, methacrylic acid | | | 2,5 - 10 % | |
| | 201-204-4 | 607-088-00-5 | | | |
| | Acute Tox. 4, Acute Tox. 4, Skin Corr. 1A; H312 H302 H314 | | | | |
| 7473-98-5 | 2-hydroxy-2-methylpropiophenone | | | | |
| | 231-272-0 | | | | |
| | Acute Tox. 4, Aquatic Chronic 3; H302 H412 | | | | |

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Never give anything by mouth to an unconscious person or a person with cramps.

After inhalation

Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor/ if you feel unwell.

After contact with skin

Take off immediately all contaminated clothing and wash it before reuse. Wash with plenty of soap and water. In case of skin irritation, consult a physician.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Call a physician in any case!

4.2. Most important symptoms and effects, both acute and delayed

Following inhalation: May cause an allergic skin reaction.

Following skin contact: Causes skin irritation.

After eye contact: Causes serious eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

Foam. Dry extinguishing powder. Carbon dioxide (CO2). Water spray jet. Sand

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon dioxide (CO2), Gases/vapours, toxic

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5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Wash hands and face before breaks and after work and take a shower if necessary. If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Wash contaminated clothing before reuse. Advice on protection against fire and explosion

No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

Advice on storage compatibility

Protect against direct sunlight.

7.3. Specific end use(s)

No information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

| CAS No | Substance | ppm | mg/m³ | fibres/ml | Category | Origin |
|---------|------------------|-----|-------|-----------|---------------|--------|
| 79-41-4 | Methacrylic acid | 20 | 72 | | TWA (8 h) | WEL |
| | | 40 | 143 | | STEL (15 min) | WEL |

8.2. Exposure controls





Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

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Eye/face protection

Suitable eye protection: goggles. (DIN EN 166)

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Wear suitable gloves. (DIN EN 374)
Thickness of the glove material: 0.5 mm

Breakthrough time (maximum wearing time): 480 min

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. (Combination filtering device (EN 14387))

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Colour: colourless
Odour: characteristic

Test method

pH-Value: not determined

Changes in the physical state

Melting point: not determined Initial boiling point and boiling range: not determined Flash point: > 60 °C

Sustaining combustion: UN Test L.2

Flammability

Solid: not applicable
Gas: not applicable

Explosive properties

No data available

Lower explosion limits: not determined Upper explosion limits: not determined

Auto-ignition temperature

Solid: not applicable
Gas: not applicable
Decomposition temperature: not determined

Oxidizing properties

Not oxidising.

Vapour pressure: not determined

Density: 1,1 g/cm³

Water solubility: The study does not need to be conducted because the substance is known to be insoluble

in water.

Solubility in other solvents

not determined

Partition coefficient: not determined Viscosity / dynamic: 1250 mPa·s

(at 20 °C)

Vapour density: not determined Evaporation rate: not determined

9.2. Other information

Solid content: not determined

SECTION 10: Stability and reactivity

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10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Protect from sunlight.

10.5. Incompatible materials

Strong alkali, Strong acid

10.6. Hazardous decomposition products

In case of fire may be liberated: Gases/vapours, toxic (Carbon dioxide (CO2) Carbon monoxide)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

| CAS No | No Chemical name | | | | | | |
|-----------|---------------------------------------------------------|---------------|-----------|---------|--------|--------|--|
| | Exposure route | Dose | | Species | Source | Method | |
| 5888-33-5 | 33-5 Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-ylacrylate | | | | | | |
| | oral | LD50 mg/kg | 4890 | Rat | | Gestis | |
| | dermal | LD50 mg/kg | 5000 | Rabbit | | Gestis | |
| 79-41-4 | 2-methylpropenoic acid, methacrylic acid | | | | | | |
| | oral | ATE | 500 mg/kg | | | | |
| | dermal | ATE mg/kg | 1100 | | | | |
| 7473-98-5 | 2-hydroxy-2-methylpropiophenone | | | | | | |
| | oral | ATE | 500 mg/kg | | | | |

Irritation and corrosivity

Causes skin irritation.

Causes serious eye damage.

Sensitising effects

May cause an allergic skin reaction. ((1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate)

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

May cause respiratory irritation. (Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-ylacrylate;

(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate; 2-methylpropenoic acid, methacrylic acid)

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]

SECTION 12: Ecological information

12.1. Toxicity

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

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

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12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS

(PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants

containing organic solvents or other hazardous substances; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3. Transport hazard class(es):914.4. Packing group:IIIHazard label:9



Classification code: M6

Special Provisions: 274 335 375 601

Limited quantity: 5 L
Excepted quantity: E1
Transport category: 3
Hazard No: 90
Tunnel restriction code: -

Inland waterways transport (ADN)

14.1. UN number: UN 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3. Transport hazard class(es):914.4. Packing group:IIIHazard label:9



Classification code:

Special Provisions: 274 335 375 601

Limited quantity: 5 L Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number: UN 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

 14.3. Transport hazard class(es):
 9

 14.4. Packing group:
 III

 Hazard label:
 9

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Special Provisions: 274, 335, 969

Limited quantity: 5 L
Excepted quantity: E1
EmS: F-A, S-F
Segregation group: azides

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3. Transport hazard class(es):914.4. Packing group:IIIHazard label:9



Special Provisions:

Limited quantity Passenger:

Passenger LQ:

Excepted quantity:

A97 A158 A197

30 kg G

Y964

Excepted quantity:

E1

IATA-packing instructions - Passenger:964IATA-max. quantity - Passenger:450 LIATA-packing instructions - Cargo:964IATA-max. quantity - Cargo:450 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes

Danger releasing substance: Marine pollutant

14.6. Special precautions for user

No transport classification available. Transport carrier not used.

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

No transport classification available. Transport carrier not used.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulatory information

Water contaminating class (D):

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work

protection guideline' (94/33/EC). 2 - clearly water contaminating

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,4,5,6,7,8,9,10,11,12,13,14,15,16.

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)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

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ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)

| 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. |
| H335 | May cause respiratory irritation. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singulary responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)