

Safety Data Sheet

according to Regulation (EC) No 1907/2006

X60 - B

Print date: 15.06.2015

Page 1 of 9

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

X60 - B

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

Adhesives, sealants

1.3. Details of the supplier of the safety data sheet

Company name: Hottinger Baldwin Messtechnik GmbH
Darmstadt
Street: Im Tiefen See 45
Place: D-64293 Darmstadt
Telephone: +49 (0)6151 803-0
e-mail: info@de.hbm.com
Internet: www.hbm.com
Responsible Department: Customer Care Center CCC +49 6151 803 0

1.4. Emergency telephone number: +49(0)6131/19240

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Directive 67/548/EEC or 1999/45/EC**

Indications of danger: F - Highly flammable, Xn - Harmful

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

Hazard Statements:
Highly flammable liquid and vapour.
May cause respiratory irritation.
Causes serious eye irritation.
Causes skin irritation.
May cause an allergic skin reaction.

2.2. Label elements**Hazardous components which must be listed on the label**

methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate
2-hydroxyethyl methacrylate
N,N-dimethyl-p-toluidine

Signal word: Danger
Pictograms: GHS02-GHS07

**Hazard statements**

H225 Highly flammable liquid and vapour.
H335 May cause respiratory irritation.
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

X60 - B

Print date: 15.06.2015

Page 2 of 9

Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P280 Wear protective gloves/protective clothing/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.

2.3. Other hazards

According to EC directives or the corresponding national regulations the product does not have to be labelled.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture related information

Hazardous components

| EC No | Chemical name | Quantity |
|--------------|---|----------|
| CAS No | Classification according to Directive 67/548/EEC | |
| Index No | Classification according to Regulation (EC) No. 1272/2008 [CLP] | |
| REACH No | | |
| 201-297-1 | methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate | 60-100% |
| 80-62-6 | F - Highly flammable, Xi - Irritant R11-37/38-43 | |
| 607-035-00-6 | Flam. Liq. 2, STOT SE 3, Skin Irrit. 2, Skin Sens. 1; H225 H335 H315 H317 | |
| 212-782-2 | 2-hydroxyethyl methacrylate | 15-40% |
| 868-77-9 | Xi - Irritant R36/38-43 | |
| 607-124-00-X | Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1; H319 H315 H317 | |
| 202-805-4 | N,N-dimethyl-p-toluidine | 1,0-5,0% |
| 99-97-8 | T - Toxic R23/24/25-33-52-53 | |
| 612-056-00-9 | Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, STOT RE 2, Aquatic Chronic 3; H331 H311 H301 H373 ** H412 | |

Full text of R-, H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air. In case of respiratory tract irritation, consult a physician.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.
Remove contaminated, saturated clothing immediately.
In case of skin irritation, consult a physician.

After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.
Do NOT induce vomiting. Aspiration hazard

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

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

X60 - B

Print date: 15.06.2015

Page 3 of 9

In the case of bluish discoloration (lips, earlobes, finger nails) give oxygen as soon as possible.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**Carbon dioxide (CO₂). Extinguishing powder. alcohol resistant foam.**Unsuitable extinguishing media**

High power water jet.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Explosion hazard.

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. Provide adequate ventilation.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

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

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking.
Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep only in the original container at temperature not exceeding 30 °C. Keep locked up. Store in a place accessible by authorized persons only.

Advice on storage compatibility

Do not store together with:
- Material, rich in oxygen, oxidizing.
- Pyrophoric liquids and solids

Further information on storage conditions

Keep container tightly closed. Store in a cool dry place.
Keep container in a well-ventilated place.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Safety Data Sheet

according to Regulation (EC) No 1907/2006

X60 - B

Print date: 15.06.2015

Page 4 of 9

Exposure limits (EH40)

| CAS No | Substance | ppm | mg/m ³ | fibres/ml | Category | Origin |
|---------|---------------------|-----|-------------------|-----------|---------------|--------|
| 80-62-6 | Methyl methacrylate | 50 | 208 | | TWA (8 h) | WEL |
| | | 100 | 416 | | STEL (15 min) | WEL |

Additional advice on limit values

Y: A risk of reproductive effects needs not to be feared if the occupational exposure limit value (AGW) and the biological limit value (BGW) is kept (TRGS 900)

N,N-dimethyl-p-toluidine:
The product is skin resorptive.

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

Protect skin by using skin protective cream.
Remove contaminated, saturated clothing immediately.
After work, wash hands and face.
When using do not eat or drink.

Eye/face protection

Tightly sealed safety glasses.

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.
The required protective gloves have to be specified by the glove material and the penetration time of the glove material depending on strength and duration of dermal exposition.
Wear suitable protective clothing and gloves.
Suitable gloves type: Butyl rubber.

Skin protection

Wear suitable protective clothing.

Respiratory protection

Recommendation: Use appropriate respiratory protection.
If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state: liquid
Colour: yellow
Odour: ester

Test method**Changes in the physical state**

Melting point: -50 °C
Initial boiling point and boiling range: 101 °C

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

X60 - B

Print date: 15.06.2015

Page 5 of 9

| | | |
|--|-------------------------------|------------|
| Flash point: | 10 °C | DIN 51755 |
| Flammability | | |
| Solid: | not determined | |
| Explosive properties | | |
| In use, may form flammable/explosive vapour-air mixture. | | |
| Lower explosion limits: | 2,1 vol. % | |
| Upper explosion limits: | 12,5 vol. % | |
| Ignition temperature: | not determined | ASTM E 659 |
| Auto-ignition temperature | | |
| Solid: | not determined | |
| Vapour pressure: (at 20 °C) | 40 hPa | |
| Density (at 20 °C): | 0,93 - 0,97 g/cm ³ | |
| Water solubility: (at 20 °C) | 295 g/L | |
| Solubility in other solvents | | |
| Soluble in: Acetone | | |
| Viscosity / dynamic: (at 20 °C) | 2 mPa·s | |
| Vapour density: (at 20 °C) | >1 | |

9.2. Other information**SECTION 10: Stability and reactivity****10.3. Possibility of hazardous reactions**

Do not mix with peroxid-accelerators or reduction agents.

10.4. Conditions to avoid

Keep away from heat. Ignition hazard.

10.6. Hazardous decomposition products

This article doesn't contain dangerous substances or preparations intended to be released under normal or reasonably foreseeable conditions of use.

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

Acute toxicity, oral.
Acute toxicity, inhalant.
Acute toxicity, dermal.

ATEmix calculated

ATE (oral) 2000,0 mg/kg

Safety Data Sheet

according to Regulation (EC) No 1907/2006

X60 - B

Print date: 15.06.2015

Page 6 of 9

| CAS No | Chemical name | | | | |
|----------|-----------------------------|--------|------------|---------|--------|
| | Exposure routes | Method | Dose | Species | Source |
| 868-77-9 | 2-hydroxyethyl methacrylate | | | | |
| | oral | LD50 | 5050 mg/kg | Rat | |
| 99-97-8 | N,N-dimethyl-p-toluidine | | | | |
| | oral | ATE | 100 mg/kg | | |
| | dermal | ATE | 300 mg/kg | | |
| | inhalative (4 h) vapour | LC50 | 1,4 mg/l | Ratte | GESTIS |
| | inhalative aerosol | ATE | 0,5 mg/l | | |

Irritation and corrosivity

Irritating to eyes. Following inhalation: Lung irritation. Coughing. shortage of breath. After skin contact: Irritant.

Sensitising effects

May cause sensitisation by skin contact.

Severe effects after repeated or prolonged exposure

Danger of serious damage to health by prolonged exposure.

Additional information on tests

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 12: Ecological information

12.1. Toxicity

| CAS No | Chemical name | | | | | |
|----------|-----------------------------|--------|----------|-----------|---------------------|--------|
| | Aquatic toxicity | Method | Dose | [h] [d] | Species | Source |
| 868-77-9 | 2-hydroxyethyl methacrylate | | | | | |
| | Acute fish toxicity | LC50 | 227 mg/l | 96 h | Pimephales promelas | |

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

| CAS No | Chemical name | Log Pow |
|----------|-----------------------------|---------|
| 868-77-9 | 2-hydroxyethyl methacrylate | 0,47 |
| 99-97-8 | N,N-dimethyl-p-toluidine | 2,81 |

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Dispose of waste according to applicable legislation. Contaminated packages must be completely emptied and can be re-used following proper cleaning.

Waste disposal number of waste from residues/unused products

070208 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of plastics, synthetic rubber and man-made fibres; other still bottoms and reaction residues
Classified as hazardous waste.

Contaminated packaging

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

X60 - B

Print date: 15.06.2015

Page 7 of 9

substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)**

14.1. UN number: UN1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S.
Contains: Methyl methacrylate.
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3



Classification code: F1
Special Provisions: A3
Limited quantity: 1 L
Transport category: 2
Hazard No: 33
Tunnel restriction code: D/E

Inland waterways transport (ADN)

14.1. UN number: UN1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S.
Contains: Methyl methacrylate.
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3



Classification code: F1
Special Provisions: A3
Limited quantity: 1 L

Marine transport (IMDG)

14.1. UN number: UN1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S.
Contains: Methyl methacrylate.
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3



Special Provisions: A3
Limited quantity: 1 L
EmS: F-E, S-E

Air transport (ICAO)

Safety Data Sheet

according to Regulation (EC) No 1907/2006

X60 - B

Print date: 15.06.2015

Page 8 of 9

| | |
|--|---|
| 14.1. UN number: | UN1993 |
| 14.2. UN proper shipping name: | FLAMMABLE LIQUID, N.O.S. Contains: Methyl methacrylate |
| 14.3. Transport hazard class(es): | 3 |
| 14.4. Packing group: | II |
| Hazard label: | 3 |



| | |
|--|------|
| Special Provisions: | A3 |
| Limited quantity Passenger: | 1 L |
| IATA-packing instructions - Passenger: | 353 |
| IATA-max. quantity - Passenger: | 5 L |
| IATA-packing instructions - Cargo: | 364 |
| IATA-max. quantity - Cargo: | 60 L |

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

| | |
|--------------------------------|--|
| Employment restrictions: | Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing. Observe employment restrictions for women of child-bearing age. |
| Water contaminating class (D): | 2 - water contaminating |

SECTION 16: Other information**Relevant R-phrases (Number and full text)**

| | |
|----------|---|
| 11 | Highly flammable. |
| 23/24/25 | Toxic by inhalation, in contact with skin and if swallowed. |
| 33 | Danger of cumulative effects. |
| 36/38 | Irritating to eyes and skin. |
| 37/38 | Irritating to respiratory system and skin. |
| 43 | May cause sensitisation by skin contact. |
| 52 | Harmful to aquatic organisms. |
| 53 | May cause long-term adverse effects in the aquatic environment. |

Relevant H- and EUH-phrases (Number and full text)

| | |
|------|--|
| H225 | Highly flammable liquid and vapour. |
| H301 | Toxic if swallowed. |
| H311 | Toxic in contact with skin. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H331 | Toxic if inhaled. |
| H335 | May cause respiratory irritation. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H412 | Harmful to aquatic life with long lasting effects. |

Further Information

The information is based on present levels of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.



Safety Data Sheet

according to Regulation (EC) No 1907/2006

X60 - B

Print date: 15.06.2015

Page 9 of 9

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