1. Identification

Product identifier
EP150

Recommended use of the chemical and restrictions on use
Use of the substance/mixture
Adhesives, sealants

Details of the supplier of the safety data sheet
Company name: Hottinger Baldwin Messtechnik GmbH
Street: Im Tiefen See 45
Place: D-64293 Darmstadt
Telephone: +49 (0)6151 803-0
Internet: www.hbm.com

Responsible Department:

Emergency phone number: +49(0)6131 19240

2. Hazard(s) identification

Classification of the chemical
29 CFR Part 1910.1200
Flammable liquids: Flam. Liq. 2
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2A
Respiratory or skin sensitization: Skin Sens. 1
Specific target organ toxicity single exposure: STOT SE 3 (narcotic effects)

Label elements
29 CFR Part 1910.1200
Signal word: Danger

Pictograms:

Hazard statements
Highly flammable liquid and vapor
Causes skin irritation
May cause an allergic skin reaction
Causes serious eye irritation
May cause drowsiness or dizziness

Precautionary statements
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Wash ... thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin: Wash with plenty of water.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
Specific treatment (see ... on this label).
If skin irritation occurs:
If skin irritation or rash occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
Call a poison center/doctor if you feel unwell.
If in eyes: 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.
In case of fire: Use ... to extinguish.
Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container to ....

Hazards not otherwise classified
No information available.

3. Composition/information on ingredients

Mixtures

Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>78-93-3</td>
<td>butanone; ethyl methyl ketone</td>
</tr>
<tr>
<td>25068-38-6</td>
<td>epoxy resin (number average molecular weight &lt;= 700), reaction product: bisphenol-A- (epichlorhydrin)</td>
</tr>
<tr>
<td>123-42-2</td>
<td>4-hydroxy-4-methylpentan-2-one, diacetone alcohol</td>
</tr>
<tr>
<td>1330-20-7</td>
<td>xylene</td>
</tr>
<tr>
<td>80-08-0</td>
<td>4,4′-diamino diphenyl sulfone, dapsone</td>
</tr>
</tbody>
</table>

Quantity

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>35 - &lt; 40 %</td>
<td></td>
</tr>
<tr>
<td>20 - &lt; 25 %</td>
<td></td>
</tr>
<tr>
<td>15 - &lt; 20 %</td>
<td></td>
</tr>
<tr>
<td>10 - &lt; 15 %</td>
<td></td>
</tr>
<tr>
<td>5 - &lt; 10 %</td>
<td></td>
</tr>
</tbody>
</table>

Further Information
No information available.

4. First-aid measures

Description of first aid measures

General information
Remove affected person from the danger area and lay down. If unconscious place in recovery position and seek medical advice. First aider: Pay attention to self-protection!

After inhalation
Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin
After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes
After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion
Rinse mouth immediately and drink plenty of water.

Most important symptoms and effects, both acute and delayed
No information available.
5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media
- Carbon dioxide (CO2), Foam, Extinguishing powder.

Unsuitable extinguishing media
- Water.

Specific hazards arising from the chemical
- Highly flammable. Vapors may form explosive mixtures with air.

Special protective equipment and precautions for fire-fighters
- Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information
- Use water spray/stream 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.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
- Remove all sources of ignition. Do not breathe gas/fume/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

Environmental precautions
- Do not allow uncontrolled discharge of product into the environment. Danger of explosion

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.

Reference to other sections
- Safe handling: see section 7
- Personal protection equipment (PPE): see section 8
- Disposal: see section 13

7. Handling and storage

Precautions for safe handling

Advice on safe handling
- If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fume/vapour/spray.

Advice on protection against fire and explosion
- Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapors may form explosive mixtures with air.

Further information on handling
- Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
- Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Hints on joint storage
Do not store together with: Oxidising agent, strong, Combustible substances of acute toxicity, category 1 and 2
/very toxic substances Non-combustible substances of acute toxicity, category 1 and 2/very toxic substances

Further information on storage conditions
Keep container tightly closed in a cool, well-ventilated place.

8. Exposure controls/personal protection

Control parameters

Exposure limits

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>t/cc</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>78-93-3</td>
<td>2-Butanone (Methyl ethyl ketone)</td>
<td>200</td>
<td>590</td>
<td>TWA (8 h)</td>
<td>PEL</td>
<td></td>
</tr>
<tr>
<td>78-93-3</td>
<td>2-Butanone</td>
<td>200</td>
<td>590</td>
<td>TWA (8 h)</td>
<td>REL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>300</td>
<td>885</td>
<td>STEL (15 min)</td>
<td>REL</td>
<td></td>
</tr>
<tr>
<td>123-42-2</td>
<td>Diacetone alcohol (4-Hydroxy-4-methyl-2-pentanone)</td>
<td>50</td>
<td>240</td>
<td>TWA (8 h)</td>
<td>PEL</td>
<td></td>
</tr>
<tr>
<td>123-42-2</td>
<td>Diacetone alcohol</td>
<td>50</td>
<td>240</td>
<td>TWA (8 h)</td>
<td>REL</td>
<td></td>
</tr>
<tr>
<td>1330-20-7</td>
<td>Xylenes (o-,m-,p-isomers)</td>
<td>100</td>
<td>435</td>
<td>TWA (8 h)</td>
<td>PEL</td>
<td></td>
</tr>
</tbody>
</table>

Additional advice on limit values
No information available.

Exposure controls

Appropriate engineering controls
If handled uncovered, arrangements with local exhaust ventilation should be used if possible.
In use, may form flammable/explosive vapor-air mixture.
Use explosion-proof electrical equipment.

Protective and hygiene measures
When using do not eat or drink. Do not breathe gas/fume/vapour/spray.
After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. Wear suitable protective clothing, gloves and eye/face protection.
Draw up and observe skin protection programme.

Eye/face protection
Wear eye/face protection.

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.
EN 374

Skin protection
Used working clothes should not be worn outside the work area.
Separate storage of work clothes.
Wear anti-static footwear and clothing.
Respiratory protection
If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Filtering device (full mask or mouthpiece) with filter: A

Environmental exposure controls
Do not allow to enter into surface water or drains. The vapors are heavier than air and can accumulate in high concentrations on the ground, in cavities, channels and cellars.

9. Physical and chemical properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state:</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color:</td>
<td>transparent</td>
</tr>
<tr>
<td>Odor:</td>
<td>Adhesives, sealants</td>
</tr>
<tr>
<td>pH-Value:</td>
<td>not determined</td>
</tr>
<tr>
<td>Changes in the physical state</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point:</td>
<td>not determined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>80 °C</td>
</tr>
<tr>
<td>Sublimation point:</td>
<td>not determined</td>
</tr>
<tr>
<td>Softening point:</td>
<td>not determined</td>
</tr>
<tr>
<td>Pour point:</td>
<td>not determined</td>
</tr>
<tr>
<td>Flash point:</td>
<td>-4 °C</td>
</tr>
<tr>
<td>Sustaining combustion:</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Explosive properties
No information available.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower explosion limits:</td>
<td>0,7 vol. %</td>
</tr>
<tr>
<td>Upper explosion limits:</td>
<td>11,5 vol. %</td>
</tr>
<tr>
<td>Ignition temperature:</td>
<td>465 °C</td>
</tr>
</tbody>
</table>

Auto-ignition temperature
Solid: not applicable
Gas: not applicable

Decomposition temperature: not determined

Oxidizing properties
Not oxidising.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor pressure: (at 20 °C):</td>
<td>8 hPa</td>
</tr>
<tr>
<td>Vapor pressure: (at 50 °C):</td>
<td>9 hPa</td>
</tr>
<tr>
<td>Density (at 20 °C):</td>
<td>0,934 g/cm³</td>
</tr>
<tr>
<td>Bulk density:</td>
<td>not determined</td>
</tr>
<tr>
<td>Water solubility:</td>
<td>The study does not need to be conducted because the substance is known to be insoluble in water.</td>
</tr>
</tbody>
</table>
10. Stability and reactivity

Reactivity
Highly flammable.

Chemical stability
The product is stable under storage at normal ambient temperatures.

Possibility of hazardous reactions
No known hazardous reactions.

Conditions to avoid
Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapors may form explosive mixtures with air.

Incompatible materials
No information available.

Hazardous decomposition products
No known hazardous decomposition products.

Further information
No information available.

11. Toxicological information

Information on toxicological effects

Acute toxicity
Based on available data, the classification criteria are not met.
## Components CAS No Components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
<th>Exposure route</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>123-42-2</td>
<td>4-hydroxy-4-methylpentan-2-one, diacetone alcohol</td>
<td>oral</td>
<td>LD50 mg/kg</td>
<td>2520</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50 mg/kg</td>
<td>13630</td>
<td>Rabbit</td>
<td></td>
</tr>
<tr>
<td>1330-20-7</td>
<td>xylene</td>
<td>dermal</td>
<td>ATE mg/kg</td>
<td>1100</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation vapour</td>
<td>ATE mg/l</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalation aerosol</td>
<td>ATE mg/l</td>
<td>1,5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80-08-0</td>
<td>4,4'-diamino diphenyl sulfone, dapsone</td>
<td>oral</td>
<td>ATE mg/kg</td>
<td>500</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Irritation and corrosivity
- Causes skin irritation
- Causes serious eye irritation

### Sensitizing effects
- May cause an allergic skin reaction (epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin))

### Carcinogenic/mutagenic/toxic effects for reproduction
Based on available data, the classification criteria are not met.

### Specific target organ toxicity (STOT) - single exposure
- May cause drowsiness or dizziness (butanone; ethyl methyl ketone)

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

### Specific target organ toxicity (STOT) - repeated exposure
Carcinogenicity (OSHA): No ingredient of this mixture is listed.
Carcinogenicity (IARC): Xylenes (CAS 1330-20-7) is listed in group 3. Dapsone (CAS 80-08-0) is listed in group 3.
Carcinogenicity (NTP): No ingredient of this mixture is listed.

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

### Specific effects in experiment on an animal
No information available.

### Additional information on tests
The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

### Practical experience
Observations relevant to classification
No information available.

### Other observations
No information available.

### Further information
No information available.

## 12. Ecological information

### Ecotoxicity
@1501.B015605
Persistence and degradability
The product has not been tested.

Bioaccumulative potential
The product has not been tested.

Mobility in soil
The product has not been tested.

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.

13. Disposal considerations

Waste treatment methods
Advice on disposal
Dispose of waste according to applicable legislation.

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

14. Transport information

US DOT 49 CFR 172.101

| UN/ID number: | UN 1133 |
| Proper shipping name: | Adhesives |
| Transport hazard class(es): | III |
| Packing group: | III |
| Hazard label: | 3 |

Marine transport (IMDG)

| UN number: | UN 1133 |
| UN proper shipping name: | Adhesives |
| Transport hazard class(es): | III |
| Packing group: | III |
| Hazard label: | 3 |

Limited quantity: 5 L
Excepted quantity: E1
EmS: F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

| UN number: | UN 1133 |
| UN proper shipping name: | Adhesives |
| Transport hazard class(es): | III |
| Packing group: | III |
| Hazard label: | 3 |
Limited quantity Passenger: 10 L
Passenger LQ: Y344
Excepted quantity: E1
IATA-packing instructions - Passenger: 355
IATA-max. quantity - Passenger: 60 L
IATA-packing instructions - Cargo: 366
IATA-max. quantity - Cargo: 220 L

**Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

**Special precautions for user**

No information available.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

not applicable

**15. Regulatory information**

**U.S. Regulations**

**National regulatory information**

SARA Section 304 CERCLA:
- Methyl ethyl ketone (78-93-3): Reportable quantity = 5,000 (2270) lbs. (kg)
- Xylene (mixed isomers) (1330-20-7): Reportable quantity = 100 (45.4) lbs. (kg)

SARA Section 311/312 Hazards:
- Methyl ethyl ketone (78-93-3): Fire hazard, Immediate (acute) health hazard
- Epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin) (25068-38-6): Immediate (acute) health hazard
- 4-hydroxy-4-methylpentan-2-one, diacetone alcohol (123-42-2): Immediate (acute) health hazard
- Xylene (mixed isomers) (1330-20-7): Fire hazard, Immediate (acute) health hazard
- 4,4'-diamino diphenyl sulfone, dapsone (80-08-0): Immediate (acute) health hazard

SARA Section 313 Toxic release inventory:
- Xylene (mixed isomers) (1330-20-7): De minimis limit = 1.0 %, Reportable threshold = Standard
- Clean Air Act Section 112(b):
  - Methyl ethyl ketone (78-93-3), Xylene (mixed isomers) (1330-20-7)

**State Regulations**

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)
- This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

**16. Other information**

Revision date: 10.07.2019
Revision No: 1,2

**Abbreviations and acronyms**

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(Auropean 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
ELINCS: European List of Notified Chemical Substances
Safety Data Sheet

according to 29 CFR 1910.1200(g)

EP150

Revision date: 10.07.2019

CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Other data
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.)