

## Safety Data Sheet

### HOT CURE HARDENER

Revision date: 07/11/2019  
Version: 1.0.0

#### SECTION 1: Identification of the substance/preparation and of the company/undertaking

##### 1.1. Product identifier

Trade name: HOT CURE HARDENER

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

Recommended uses: Hardener for epoxy resin.

##### 1.3. Details of the supplier of the safety data sheet

###### Supplier

Company: SACPRO AB  
Address: Källviksvägen 10  
Zip code: 791 52  
City: Falun  
Country: SWEDEN  
E-mail: info@sacpro.se  
Phone: +46 23 79 06 50

##### 1.4. Emergency Telephone Number

Members of the public: 111 (NHS 111 (Scotland: NHS 24))

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

CLP-classification: Acute Tox. 4;H302 Skin Corr. 1C;H314 Aquatic Chronic 3;H412

Most serious harmful effects: Harmful if swallowed. Causes severe skin burns and eye damage. Harmful to aquatic life with long lasting effects.

##### 2.2. Label elements

###### Pictograms



Signal word: Danger

###### Contains

Substance: bicyklo[2.2.1]heptanebis(metylamine)

###### H-phrases

H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H412 Harmful to aquatic life with long lasting effects.



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#### P-phrases

|              |  |
|--------------|--|
| P273         | Avoid release to the environment.  |
| P280         | Wear protective gloves/protective clothing/eye protection/face protection.   |
| P301+312     | IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.  |
| P303+361+353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].                         |
| P305+351+338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310         | Immediately call a POISON CENTER or doctor/physician.  |
| P501         | Dispose of contents/container in accordance with local regulation.   |

#### 2.3. Other hazards

When mixing two components, consult the safety data sheets for both components.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

| Substance                             | CAS No     | EC No     | REACH Reg. No. | Concentration | Notes | CLP-classification  |
|---------------------------------------|------------|-----------|----------------|---------------|-------|---|
| bicyklo[2.2.1]heptanebis (metylamine) | 56602-77-8 | 260-280-7 |                | 60 - 100%     |       | Acute Tox. 4;H302<br>Skin Corr. 1C;H314<br>Aquatic Chronic 3;H412 |

Please see section 16 for the full text of H-phrases.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

|                      |  |
|----------------------|--|
| <b>Inhalation:</b>   | Seek fresh air. Call a POISON CENTER or doctor/physician if you feel unwell.   |
| <b>Ingestion:</b>    | Wash out mouth thoroughly and drink 1-2 glasses of water in small sips. Do not induce vomiting. Seek medical advice immediately.   |
| <b>Skin contact:</b> | Wash skin with soap and water. Do not use organic solvents. Immediately call a POISON CENTER or doctor/physician.  |
| <b>Eye contact:</b>  | Open eye wide, remove any contact lenses and flush immediately with water (preferably using eye wash equipment). Seek medical advice immediately. Continue flushing until medical attention is obtained. |
| <b>General:</b>      | Eye wash facilities must be available when handling this product.  |

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

The product is corrosive. May cause serious, possibly permanent, corrosion damage to the eyes. Harmful if swallowed.

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

Open eye wide, remove any contact lenses and flush immediately with water (preferably using eye wash equipment). Seek medical advice immediately. Continue flushing until medical attention is obtained. Treat symptoms.

### SECTION 5: Fire-fighting measures

#### 5.1. Extinguishing media

|  |   |
|--|---|
| <b>Suitable extinguishing media:</b>   | Extinguish with powder, foam, carbon dioxide or water mist. |
| <b>Unsuitable extinguishing media:</b> | Do not use water stream, as it may spread the fire.         |

## Safety Data Sheet

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Revision date: 07/11/2019  
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#### 5.2. Special hazards arising from the substance or mixture

Not flammable, but can sustain combustion. Hazardous fumes are formed in fire conditions. Nitrous gases/ Carbon monoxide and carbon dioxide. Heating will cause a rise in pressure in packaging with a risk of bursting.

#### 5.3. Advice for fire-fighters

Wear Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit.

**Other Information:** Notify proper authorities in case of contamination of soil or aquatic environment or discharge to drains.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel:** Keep unnecessary people away, isolate hazard area and deny entry. Wear suitable protective clothing. Wear safety goggles if there is a risk of eye splash. Provide adequate ventilation. Smoking and naked flames prohibited. In case of insufficient ventilation, wear respiratory protective equipment.

**For emergency responders:** In addition to the above: No special requirements.

#### 6.2. Environmental precautions

Prevent spillage from entering drains and/or surface water. Notify proper authorities in case of contamination of soil or aquatic environment or discharge to drains.

#### 6.3. Methods and material for containment and cleaning up

Contain and absorb spill with sand or other absorbent material and transfer to suitable waste containers.

#### 6.4. Reference to other sections

See section 8 for information on exposure controls and personal protection. See section 7 for handling and storage. See section 13 for waste treatment methods.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Eye wash facilities must be available when handling this product. Avoid contact with skin and eyes. All work must be carried out under well-ventilated conditions. Wash hands before breaks, before using restroom facilities, and at the end of work. Do not eat, drink or smoke during work. Avoid release to the environment.

#### 7.2. Conditions for safe storage, including any incompatibilities

Keep in tightly closed original packaging. Store in a dry, cool, well-ventilated area. Do not expose to heat (e.g. sunlight). Do not store with the following: Strong oxidisers/ Strong acids.

#### 7.3. Specific end use(s)

Polymerise together with part A during heat emission. The product is corrosive.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

**Occupational exposure limit:** Contains no substances subject to reporting requirements

## Safety Data Sheet

### HOT CURE HARDENER

Revision date: 07/11/2019  
Version: 1.0.0

**Legal basis:** Not known for the mixture.

#### 8.2. Exposure controls

**Personal protective equipment, eye/face protection:** Wear safety goggles/face protection. Eye protection must conform to EN 166.

**Personal protective equipment, skin protection:** Wear suitable protective clothing.

**Personal protective equipment, hand protection:** Wear gloves. Type of material: Nitrile rubber/ Butyl rubber. Penetration time of glove material: 3 hours. We have reduced the penetration time by a factor of 3, when the test standard EN 374-3 is done at 23°C, while the temperature inside the glove is approx. 35°C. In addition, the elastic material extends during use, thereby glove thickness and penetration time is reduced. Recommended thickness of the glove is  $\geq 0.4$  mm. Selection of the suitable gloves does not only depend on the material, but also on quality and these will vary between manufacturers.

**Personal protective equipment, respiratory protection:** In case of insufficient ventilation, wear respiratory protective equipment. Gas cartridge (organic substances).

**Other Information:** Wash hands before breaks, before using restroom facilities, and at the end of work. Take off contaminated clothing and wash before reuse.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

| Parameter            | Value/unit   |
|----------------------|--------------|
| State                | Liquid Clear |
| Colour               | Light yellow |
| Odour                | Amine odour  |
| Solubility           | No data      |
| Explosive properties | No data      |
| Oxidising properties | No data      |

| Parameter                               | Value/unit | Remarks |
|---|------------|---------|
| pH (solution for use)                   | No data    |         |
| pH (concentrate)                        | No data    |         |
| Melting point                           | No data    |         |
| Freezing point                          | No data    |         |
| Initial boiling point and boiling range | > 150 °C   | 760mmHg |
| Flash Point                             | > 150 °C   |         |
| Evaporation rate                        | No data    |         |
| Flammability (solid, gas)               | No data    |         |
| Flammability limits                     | No data    |         |
| Explosion limits                        | No data    |         |
| Vapour pressure                         | No data    |         |
| Vapour density                          | No data    |         |
| Relative density                        | No data    |         |
| Partition coefficient n-octanol/water   | No data    |         |
| Auto-ignition temperature               | > 150 °C   |         |
| Decomposition temperature               | No data    |         |
| Viscosity                               | ~ 0.1 Pas  | 25°C    |
| Odour threshold                         | No data    |         |

### 9.2 Other information

## Safety Data Sheet

### HOT CURE HARDENER

Revision date: 07/11/2019  
Version: 1.0.0

#### SECTION 10: Stability and reactivity

##### 10.1. Reactivity

##### 10.2. Chemical stability

The product is stable when used in accordance with the supplier's directions.

##### 10.3. Possibility of hazardous reactions

May react under considerable heat buildup with epoxy.

##### 10.4. Conditions to avoid

Avoid heating and contact with ignition sources. Avoid contact with the following: Oxidisers/ Strong acids.

##### 10.5. Incompatible materials

Strong oxidisers/ Strong acids.

##### 10.6. Hazardous decomposition products

Hazardous fumes are formed in fire conditions. Nitrous gases/ Carbon monoxide and carbon dioxide.

#### SECTION 11: Toxicological information

##### 11.1. Information on toxicological effects

##### Acute toxicity - oral

##### bicyklo[2.2.1]heptanebis(metylamine), cas-no 56602-77-8

| Organism | Test Type | Exposure time | Value     | Conclusion | Test method | Source |
|----------|-----------|---------------|-----------|------------|-------------|--------|
| Rat      | LD50      |               | 961 mg/kg |            |             |        |

Harmful if swallowed.

**Skin corrosion/irritation:** Causes severe skin burns and eye damage.

**Serious eye damage/eye irritation:** Causes serious eye damage.

#### SECTION 12: Ecological information

##### 12.1. Toxicity

##### bicyklo[2.2.1]heptanebis(metylamine), cas-no 56602-77-8

| Organism  | Species       | Exposure time | Test Type | Value   | Conclusion | Test method | Source |
|-----------|---------------|---------------|-----------|---------|------------|-------------|--------|
| Crustacea | Daphnia magna | 48h           | EC50      | 31 mg/l |            |             |        |
| Algae     |               | 72h           |           | 35 mg/l |            |             |        |

No results from ecotoxicological tests are available. Ecotoxicological information only related to components.

##### 12.2. Persistence and degradability

Not readily degradable.

##### 12.3. Bioaccumulative potential

No bioaccumulation expected.

##### 12.4. Mobility in soil

## Safety Data Sheet

### HOT CURE HARDENER

Revision date: 07/11/2019  
Version: 1.0.0

Test data are not available.

#### 12.5. Results of PBT and vPvB assessment

The product does not contain any PBT or vPvB substances.

#### 12.6. Other adverse effects

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Destruction according to local regulations.

Disposal methods: May be disposed by mixing with the right amount of epoxy-resin.

Contaminated packaging: Put the empty container up-side-down. Use a tool to completely empty the container. Sort the waste according to local regulations.

**Category of waste:** 08 01 11\* waste paint and varnish containing organic solvents or other hazardous substances  
15 01 10\* packaging containing residues of or contaminated by hazardous substances

### SECTION 14: Transport information

#### Land transport (ADR/RID)

|  |   |                                     |  |
|--|---|-------------------------------------|--|
| <b>14.1. UN-No.:</b>                     | 3267  | <b>14.4. Packing group:</b>         | III  |
| <b>14.2. UN proper shipping name:</b>    | CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (bicyklo[2.2.1]heptanebis(metylamine)) | <b>14.5. Environmental hazards:</b> | The product should not be labelled as an environmental hazard (symbol: fish and tree). |
| <b>14.3. Transport hazard class(es):</b> | 8   |                                     |  |
| <b>Hazard label(s):</b>                  | 8   |                                     |  |
| <b>Hazard identification number:</b>     | 80  | <b>Tunnel restriction code:</b>     | E  |

#### Inland water ways transport (ADN)

|  |   |                                     |  |
|--|---|-------------------------------------|--|
| <b>14.1. UN-No.:</b>                     | 3267  | <b>14.4. Packing group:</b>         | III  |
| <b>14.2. UN proper shipping name:</b>    | CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (bicyklo[2.2.1]heptanebis(metylamine)) | <b>14.5. Environmental hazards:</b> | The product should not be labelled as an environmental hazard (symbol: fish and tree). |
| <b>14.3. Transport hazard class(es):</b> | 8   |                                     |  |
| <b>Hazard label(s):</b>                  | 8   |                                     |  |
| <b>Transport in tank vessels:</b>        |   |                                     |  |

#### Sea transport (IMDG)

|  |   |   |   |
|--|---|---|---|
| <b>14.1. UN-No.:</b>                     | 3267  | <b>14.4. Packing group:</b>                       | III   |
| <b>14.2. UN proper shipping name:</b>    | CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (bicyklo[2.2.1]heptanebis(metylamine)) | <b>14.5. Environmental hazards:</b>               | The product is not a Marine Pollutant (MP). |
| <b>14.3. Transport hazard class(es):</b> | 8   | <b>Environmental Hazardous Substance Name(s):</b> |   |
| <b>Hazard label(s):</b>                  | 8   |   |   |

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**EmS:** F-A, S-B      **IMDG Code segregation group:** Segr. grp. 18 - Alkalis (SGG18)

#### Air transport (ICAO-TI / IATA-DGR)

|   |   |                                     |  |
|---|---|-------------------------------------|--|
| <b>14.1. UN-No.:</b>  | 3267  | <b>14.4. Packing group:</b>         | III  |
| <b>14.2. UN proper shipping name:</b>   | CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (bicyklo[2.2.1]heptanebis(metylamine)) | <b>14.5. Environmental hazards:</b> | The product should not be labelled as an environmental hazard (symbol: fish and tree). |
| <b>14.3. Transport hazard class(es):</b>  | 8   |                                     |  |
| <b>Hazard label(s):</b>   | 8   |                                     |  |
| <b>14.6. Special precautions for user</b>                                       |   |                                     |  |
| <b>14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code</b> |   |                                     |  |

### SECTION 15: Regulatory information

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

**Special Provisions:** This product is assessed and classified in accordance with the requirements of the European Parliament and Council Regulation (EC) No 1272/2008 and subsequent amendments.

#### 15.2. Chemical Safety Assessment

### SECTION 16: Other information

#### Version history and indication of changes

| Version | Revision date | Responsible | Changes  |
|---------|---------------|-------------|----------|
| 1.0.0   | 07/11/2019    | SACPRO AB   | Approved |

**Abbreviations:** ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)IMDG: International Maritime Code for Dangerous GoodsIATA: International Air Transport AssociationIATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)ICAO: International Civil Aviation OrganizationICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)GHS: Globally Harmonized System of Classification and Labelling of ChemicalsEINECS: European Inventory of Existing Commercial Chemical SubstancesCAS: Chemical Abstracts Service (division of the American Chemical Society)DNEL: Derived No-Effect Level (REACH)PNEC: Predicted No-Effect Concentration (REACH)LC50: Lethal concentration, 50 percentLD50: Lethal dose, 50 percent

**Other Information:** The information contained herein is based on the best of our knowledge and shall describe our product under the aspect of safety. They are not meant to guarantee specific properties of the product. Recipients of our product must take responsibility for observing existing laws and regulations.

**Classification method:** Calculation based on the hazards of the known components.

#### List of relevant H-statements

H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H412 Harmful to aquatic life with long lasting effects.



**HOUSELINER®**

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**SDS is prepared by**

**Company:** SACPRO AB  
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