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

1.1 Product identifier
Trade name EP Contract Hardener

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.
Application of the substance / the mixture Construction chemicals

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Saint-Gobain Weber Limited
Dickens House
Enterprise Way
Flitwick
Bedfordshire
MK45 5BY

1.4 Emergency telephone number: Product safety department

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008

GHS05 corrosion
Skin Corr. 1B H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.

GHS07
Acute Tox. 4 H302 Harmful if swallowed.
Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC Void
Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)
Hazard pictograms

GHS05  GHS07

Signal word Danger

Hazard-determining components of labelling:
3-aminomethyl-3,5,5-trimethylcyclohexylamine
Trimethylhexan-1,6-diamin

Hazard statements
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 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/doctor.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures
Description: Mixture: consisting of the following components.

Dangerous components:

| CAS: 2855-13-2 | 3-aminomethyl-3,5,5-trimethylcyclohexylamine |
| EINECS: 220-666-8 | C R34; Xn R21/22; Xi R43 |
| R52/53 | Skin Corr. 1B, H314; Acute Tox. 4, H302; Aquatic Chronic 3, H412 |

| CAS: 25620-58-0 | Trimethylhexan-1,6-diamin |
| EINECS: 247-134-8 | C R34; Xn R22; Xi R43 |
| R52/53 | Skin Corr. 1B, H314; Acute Tox. 4, H302; Aquatic Chronic 3, H412 |

25 - 50%

Additional information For the wording of the listed risk phrases refer to section 16.
SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Remove the victim immediately from the danger area. If the patient is unwell consult a doctor and present this data sheet.
Immediately remove any clothing soiled by the product.
After inhalation Supply fresh air; consult doctor in case of complaints.
After skin contact
Wash off immediately with plenty of water, continue washing. Seek immediate medical advice.
After eye contact
Rinse opened eye for several minutes under running water. Rinse liquid should be tempered (20-30 °C).
Seek immediate medical advice.
Remove contact lenses after the first 5 minutes and continue washing.

After swallowing
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
Do not give anything by mouth unless the person is fully conscious.

4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture
During heating or in case of fire poisonous gases are produced.

5.3 Advice for firefighters

Protective equipment:
Mouth respiratory protective device.
Wear fully protective suit.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation.
Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:
The product must not get into watercourses or into the soil.
Keep contaminated washing water and dispose of appropriately.

6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
SECTION 7: Handling and storage

7.1 Precautions for safe handling
Ensure adequate ventilation. Handle and open container with care. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practices. 

Information about fire - and explosion protection:
Keep away from heat and sources of ignition. Do not smoke. Take precautionary measure against static discharges.

7.2 Conditions for safe storage, including any incompatibilities

Storage
Requirements to be met by storerooms and receptacles:
Store only in unopened original receptacles.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities:
No further data; see item 7.

Ventilation: use engineering controls to maintain airbourne level below exposure limit requirements or guidelines. If there are none, use only with adequate ventilation. Local exhaust ventilation may be necessary for some operation. If possible use transferring/filling, mereing and blending plants that are closed.

8.1 Control parameters
Ingredients with limit values that require monitoring at the workplace:
Additional information:
The applicable TRGS 900 (MAK list) was used as the basis for the preparation and/or revision of this safety data sheet.

8.2 Exposure controls

Personal protective equipment:
General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals. Wash hands before breaks and at the end of work. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing.

Respiratory protection:
Use suitable respiratory protection where aerosols/vapours are generated. Use respiratory equipment with suitable filter or wear self-contained breathing apparatus. (CE approved air-purifying respirator: organic vapour cartridge with a particulate pre-filter, type AP2).

Protection of hands: Protective gloves.

Material of gloves
PVC gloves
Butyl rubber, BR
Chlorinated polyethylene.
Polyethylene.
Ethyl vinyl alcohol laminate (EVAL).
Neoprene.
Nitrile rubber.

**Penetration time of glove material**
The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.
Thickness >0.5mm

**Eye protection:**
Use close fitting goggles (EN 166).
Eye wash fountain should be located in immediate work area.

**Body protection:**
Use protective clothing chemically resistant to this material.
Remove immediately all contaminated clothing.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**General Information**

**Appearance:**
- **Form:** Fluid
- **Colour:** Yellowish
- **Odour:** Amine-like
- **Odour threshold:** Not determined.

**pH-value:**
Not applicable.

**Change in condition**
- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** 232 °C (DIN)

**Flash point:**
110 °C (DIN ISO 2592)

**Flammability (solid, gaseous):** Not applicable.

**Ignition temperature:**
350 °C (DIN 51794)

**Decomposition temperature:**
Not determined.

**Self-igniting:**
Product is not self-igniting.

**Danger of explosion:**
Product does not present an explosion hazard.

**Explosion limits:**
- **Lower:** Not determined.
- **Upper:** Not determined.

**Oxidising properties**
Not determined.

**Vapour pressure:**
Not determined.

**Density:**
Not determined

**Bulk density:**
Not applicable.
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.05.2015  Revision: 23.03.2015

Trade name EP Contract Hardener

| Relative density | Not determined. |
| Vapour density   | Not determined. |
| Evaporation rate | Not determined. |

| Solubility in / Miscibility with Water: | Not miscible or difficult to mix |
| Segregation coefficient (n-octanol/water) log Pow: | Not determined. |

| Viscosity: dynamic: | Not determined. |
| kinematic: | Not determined. |

| Solvent separation test: | Not determined. |
| Solvent content: Organic solvents: | 0.0 % |

9.2 Other information  No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity
10.2 Chemical stability  Stable at recommended storage conditions
Thermal decomposition / Conditions to be avoided:
No decomposition if used according to specifications.
10.3 Possibility of hazardous reactions
Reacts with oxidizing agents
Reacts with acids
10.4 Conditions to avoid  Keep away from sources of ignition. Protect from frost.
10.5 Incompatible materials: No further relevant information available.
10.6 Hazardous decomposition products: Ammonia

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity:
LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>2855-13-2</td>
<td>Oral</td>
<td>LD50 1030 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>2855-13-2</td>
<td>Dermal</td>
<td>LD50 1840 mg/kg (rabbit)</td>
<td></td>
</tr>
<tr>
<td>25620-58-0</td>
<td>Oral</td>
<td>LD50 910 mg/kg (rat)</td>
<td></td>
</tr>
</tbody>
</table>

Primary irritant effect:
on the skin: Irritant to skin and mucous membranes.
on the eye: Strong irritant with the danger of severe eye injury.
Sensitisation: No sensitising effects known.

SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity: No further relevant information available.

<table>
<thead>
<tr>
<th>Type of test</th>
<th>Effective concentration</th>
<th>Method</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2855-13-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC 10</td>
<td>1120 mg/l</td>
<td>(pseudomonas putida (Bacteria))</td>
<td></td>
</tr>
<tr>
<td>EC 10/18h</td>
<td>1120 mg/l</td>
<td>(pseudomonas putida (Bacteria))</td>
<td></td>
</tr>
<tr>
<td>EC50/24h</td>
<td>42 mg/l</td>
<td>(water flea)</td>
<td></td>
</tr>
<tr>
<td>EC50/48h</td>
<td>23 mg/l</td>
<td>(water flea)</td>
<td></td>
</tr>
<tr>
<td>EC50/72h</td>
<td>37 mg/l</td>
<td>(scenedesmus subspicatus (Alge))</td>
<td></td>
</tr>
<tr>
<td>LC50/48h</td>
<td>185 mg/l</td>
<td>(orfe)</td>
<td></td>
</tr>
<tr>
<td>LC50/96h</td>
<td>110 mg/l</td>
<td>(Brachydanio rerio (Zebrabärbling))</td>
<td></td>
</tr>
</tbody>
</table>

| 25620-58-0    |                          |               |            |
| EC 10/16h    | 72 mg/l                  | (pseudomonas putida (Bacteria)) |
| EC50/24h     | 31.5 mg/l                | (water flea)  |
| EC50/72h     | 29.5 mg/l                | (scenedesmus subspicatus (Alge)) |
| LC0/48h      | 150 mg/l                 | (orfe)        |
| LC50/48h     | 174 mg/l                 | (orfe)        |

12.2 Persistence and degradability: No further relevant information available.

12.3 Bioaccumulative potential

| 2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine | EBAB | 0.79 log Pow (-) |

Behaviour in environmental systems:

12.4 Mobility in soil: No further relevant information available.

Additional ecological information:

General notes:
Danger to drinking water if even small quantities leak into the ground.

12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

12.6 Other adverse effects: No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
European waste catalogue
Possible waste code. The concrete waste code depends on the source of the waste.
## SECTION 14: Transport information

### 14.1 UN-Number
ADR, IMDG, IATA

| UN2735 |

### 14.2 UN proper shipping name
ADR

| 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (TRIMETHYLHEXAMETHYLENEDIAMINES, ISOPHORONEDIAMINE) |

IMDG, IATA

| AMINES, LIQUID, CORROSIVE, N.O.S. (TRIMETHYLHEXAMETHYLENEDIAMINES, ISOPHORONEDIAMINE) |

### 14.3 Transport hazard class(es)
ADR

| 8 (C7) Corrosive substances. |

| Label: 8 |

IMDG, IATA

| 8 Corrosive substances. |

| Label: 8 |

### 14.4 Packing group
ADR, IMDG, IATA

| III |

### 14.5 Environmental hazards:

| Not applicable. |

### 14.6 Special precautions for user

| Warning: Corrosive substances. |

| Danger code (Kemler): 80 |

| EMS Number: F-A,S-B |

| Segregation groups: Alkalis |

### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

| Not applicable. |

| Transport/Additional information: Not dangerous according to the above specifications. |

(Contd. on page 9)
### ADR

<table>
<thead>
<tr>
<th><strong>Limited quantities (LQ)</strong></th>
<th>5L</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Excepted quantities (EQ)</strong></td>
<td>Code: E1</td>
</tr>
<tr>
<td></td>
<td>Maximum net quantity per inner packaging: 30 ml</td>
</tr>
<tr>
<td></td>
<td>Maximum net quantity per outer packaging: 1000 ml</td>
</tr>
</tbody>
</table>

### Transport category

<table>
<thead>
<tr>
<th><strong>Tunnel restriction code</strong></th>
<th>3</th>
</tr>
</thead>
</table>

### IMDG

<table>
<thead>
<tr>
<th><strong>Limited quantities (LQ)</strong></th>
<th>5L</th>
</tr>
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<td></td>
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</table>

### UN "Model Regulation":

- UN2735, AMINES, LIQUID, CORROSIVE, N.O.S. (TRIMETHYLHEXAMETHYLENEDIAMINES, ISOPHORONEDIAMINE), 8, III

### SECTION 15: Regulatory information

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

No further relevant information available.

**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### Relevant phrases

- **H302** Harmful if swallowed.
- **H312** Harmful in contact with skin.
- **H314** Causes severe skin burns and eye damage.
- **H317** May cause an allergic skin reaction.
- **H412** Harmful to aquatic life with long lasting effects.
- **R21/22** Harmful in contact with skin and if swallowed.
- **R22** Harmful if swallowed.
- **R34** Causes burns.
- **R43** May cause sensitisation by skin contact.
- **R52/53** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Department issuing MSDS:** Product safety department.

**Contact:**

Dr Sara Kelly  
SHEQ Systems Manager  
Weber  
Tel: 01525 722145
**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
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organisation
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3