1. Identification

Product identifier

Product name EZ-SPRAY CERAMIC HARDENER

Product number 11781-H

Recommended use of the chemical and restrictions on use

Application Hardener.

Details of the supplier of the safety data sheet

Supplier ITW Performance Polymers

Bay 150

Shannon Industrial Estate

Co. Clare

Ireland

V14 DF82

353(61)771500

353(61)471285

customerservice.shannon@itwpp.com

Emergency telephone number

Emergency telephone +44(0)1235 239 670 (24h)

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Corr. 1A - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 STOT RE 2 - H373

Environmental hazards Aquatic Chronic 3 - H412

Human health Corrosive to skin and eyes. Corrosive. Prolonged contact causes serious eye and tissue damage.

Label elements

Hazard symbols

Signal word Danger

Hazard statements H302+H332 Harmful if swallowed or if inhaled.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.
EZ-SPRAY CERAMIC HARDENER

Precautionary statements

P260 Do not breathe vapor/ spray.
P261 Avoid breathing vapor/ spray.
P264 Wash contaminated skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing must not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301+P312 If swallowed: Call a poison center/ doctor if you feel unwell.
P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
P302+P352 If on skin: Wash with plenty of water.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.
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.
P314 Get medical advice/ attention if you feel unwell.
P321 Specific treatment (see medical advice on this label).
P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 Dispose of contents/ container in accordance with national regulations.

Contains

BENZYL ALCOHOL, PACM Oligomers, METHYLENEDI(CYCLOHEXYLAMINE)

Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>m-XYLYLENEDIAMINE</th>
<th>10-30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 1477-55-0</td>
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</table>

Classification

Acute Tox. 4 - H302
Acute Tox. 4 - H332
Skin Corr. 1A - H314
Eye Dam. 1 - H318
Skin Sens. 1 - H317
Aquatic Chronic 3 - H412

PACM Oligomers

<table>
<thead>
<tr>
<th>PACM Oligomers</th>
<th>10-30%</th>
</tr>
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<tbody>
<tr>
<td>CAS number: 135108-88-2</td>
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</table>

Classification

Acute Tox. 4 - H302
Skin Corr. 1C - H314
Skin Sens. 1 - H317
STOT RE 2 - H373
Aquatic Chronic 3 - H412
### EZ-SPRAY CERAMIC HARDENER

<table>
<thead>
<tr>
<th>Component</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENZYL ALCOHOL</td>
<td>10-30%</td>
</tr>
<tr>
<td>CAS number: 100-51-6</td>
<td></td>
</tr>
<tr>
<td>Classification</td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 4 - H302</td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 4 - H332</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHYLENEDI(CYCLOHEXYLAMINE)</td>
<td>5-10%</td>
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<tr>
<td>CAS number: 1761-71-3</td>
<td></td>
</tr>
<tr>
<td>Classification</td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 4 - H302</td>
<td></td>
</tr>
<tr>
<td>Skin Corr. 1B - H314</td>
<td></td>
</tr>
<tr>
<td>Eye Dam. 1 - H318</td>
<td></td>
</tr>
<tr>
<td>Skin Sens. 1 - H317</td>
<td></td>
</tr>
<tr>
<td>STOT RE 2 - H373</td>
<td></td>
</tr>
</tbody>
</table>

The full text for all hazard statements is displayed in Section 16.

### 4. First-aid measures

**Description of first aid measures**

**General information**
Avoid contact with skin and eyes. Do not breathe vapour. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Inhalation**
Move affected person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention if any discomfort continues.

**Ingestion**
This product is corrosive. Give plenty of water to drink. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention immediately.

**Skin Contact**
Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.

**Eye contact**
Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention. Get medical attention if any discomfort continues.

**Most important symptoms and effects, both acute and delayed**

**General information**
The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation**
Toxic by inhalation. Severe irritation of nose and throat.

**Ingestion**
Harmful if swallowed. This product is corrosive.

**Skin contact**
This product is corrosive. May cause an allergic skin reaction. Allergic rash. May cause serious chemical burns to the skin.

**Eye contact**
This product is corrosive. Dust or splashes from the mixture may cause permanent eye damage.

**Indication of immediate medical attention and special treatment needed**

**Notes for the doctor**
No specific recommendations. If in doubt, get medical attention promptly.

### 5. Fire-fighting measures

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3/8
EZ-SPRAY CERAMIC HARDENER

Extinguishing media

Suitable extinguishing media: Extinguish with the following media: Carbon dioxide (CO2). Dry chemicals. Foam. Water.

Special hazards arising from the substance or mixture

Specific hazards: Avoid breathing fire gases or vapors.

Advice for firefighters

Protective actions during firefighting: Keep up-wind to avoid fumes. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions: Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation.

Environmental precautions

Environmental precautions: Avoid or minimize the creation of any environmental contamination. Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

Methods and material for containment and cleaning up

Methods for cleaning up: Absorb spillage with sand or other inert absorbent. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labeled with correct contents and hazard symbol.

Reference to other sections: Wear protective clothing as described in Section 8 of this safety data sheet.

7. Handling and storage

Precautions for safe handling

Usage precautions: Use only in well-ventilated areas. Keep away from heat, sparks and open flame. Avoid contact with skin and eyes. Do not eat, drink or smoke when using the product. Good personal hygiene procedures should be implemented.

Conditions for safe storage, including any incompatibilities

Storage precautions: Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10).

Specific end uses(s): The identified uses for this product are detailed in Section 1.

8. Exposure controls/Personal protection

Ingredient comments: WEL = Workplace Exposure Limits

Exposure controls

Protective equipment
EZ-SPRAY CERAMIC HARDENER

Appropriate engineering controls
Provide adequate general and local exhaust ventilation.

Eye/face protection
Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with OSHA 1910.133.

Hand protection
It is recommended that chemical-resistant, impervious gloves are worn. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. The selected gloves should have a breakthrough time of at least 8 hours.

Other skin and body protection
Wear chemical protective suit.

Hygiene measures
Provide eyewash station and safety shower. Keep away from food, drink and animal feeding stuffs. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using the product. Change work clothing daily before leaving workplace.

Respiratory protection
If ventilation is inadequate, suitable respiratory protection must be worn. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator. Check that the respirator fits tightly and the filter is changed regularly. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. Wear a respirator fitted with the following cartridge: Gas filter, type A2.

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>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Amber</td>
</tr>
<tr>
<td>Odor</td>
<td>Amine</td>
</tr>
<tr>
<td>pH</td>
<td>pH (diluted solution): 10.5-11.5 5%</td>
</tr>
<tr>
<td>Initial boiling point and range</td>
<td>&gt;204°C @</td>
</tr>
<tr>
<td>Flash point</td>
<td>93°C</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>&lt;&lt;1</td>
</tr>
<tr>
<td>Upper/lower flammability or</td>
<td>Upper flammable/explosive limit: N/D</td>
</tr>
<tr>
<td>explosive limits</td>
<td>Lower flammable/explosive limit: N/D</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>&lt;1mmHg @ °C</td>
</tr>
<tr>
<td>Vapor density</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.05 @ 20 °C°C</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Miscible with water.</td>
</tr>
<tr>
<td>Other information</td>
<td>Not available</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

Reactivity

Stability
Stable at normal ambient temperatures and when used as recommended.
EZ-SPRAY CERAMIC HARDENER

Possibility of hazardous reactions
Will not polymerize.

Conditions to avoid
Avoid heat, flames and other sources of ignition. Avoid excessive heat for prolonged periods of time. Avoid exposure to high temperatures or direct sunlight.

Materials to avoid
Avoid contact with the following materials: Acids. Oxidizing agents. Organic peroxides/hydroperoxides. Inorganic peroxides.

Hazardous decomposition products
Fire or high temperatures create: Nitrous gases (NOx). Oxides of the following substances: Carbon monoxide (CO). Carbon dioxide (CO2). Vapours/gases/fumes of: Ammonia or amines.

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral
ATE oral (mg/kg) 505.2

Acute toxicity - inhalation
ATE Inhalation (gases ppm) 7,502.5
ATE Inhalation (vapours mg/l) 18.34
ATE Inhalation (dusts/mists mg/l) 2.5

Inhalation
Vapors may irritate throat/respiratory system. Symptoms following overexposure may include the following: Coughing. Toxic by inhalation.

Ingestion
Causes burns. Harmful if swallowed. May cause severe internal injury. Irritating. Symptoms following overexposure may include the following: Nausea, vomiting. Stomach pain.

Skin Contact
May be absorbed through the skin. Causes burns. May cause sensitisation by skin contact. Harmful in contact with skin.

Eye contact
This product is strongly corrosive. Causes severe burns. Immediate first aid is imperative. A single exposure may cause the following adverse effects: Corneal damage.

Acute and chronic health hazards
This product is corrosive.

Target Organs
Liver Kidneys Central nervous system

12. Ecological information

Ecotoxicity
Avoid releasing into the environment.

Toxicity
Not considered toxic to fish.

Persistence and degradability
There are no data on the degradability of this product.

Bioaccumulative potential
No data available on bioaccumulation.

Mobility in soil
**EZ-SPRAY CERAMIC HARDENER**

**Mobility**

Do not discharge into drains or watercourses or onto the ground.

**Other adverse effects**

Not available.

### 13. Disposal considerations

**Waste treatment methods**

**General information**

When handling waste, the safety precautions applying to handling of the product should be considered.

**Disposal methods**

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

**Waste class**

08 04 99

### 14. Transport information

**General**

No other information known.

**UN Number**

| UN No. (TDG) | 2735 |
| UN No. (IMDG) | 2735 |
| UN No. (ICAO) | 2735 |
| UN No. (DOT) | 2735 |

**UN proper shipping name**

| Proper shipping name (TDG) | AMINES, LIQUID, CORROSIVE, N.O.S or POLYAMINES, LIQUID, CORROSIVE, N.O.S (HEXAMETHYLENEDIAMINE, DIETHYLENETRIAMINE) |
| Proper shipping name (IMDG) | AMINES, LIQUID, CORROSIVE, N.O.S or POLYAMINES, LIQUID, CORROSIVE, N.O.S (HEXAMETHYLENEDIAMINE, DIETHYLENETRIAMINE) |
| Proper shipping name (ICAO) | AMINES, LIQUID, CORROSIVE, N.O.S or POLYAMINES, LIQUID, CORROSIVE, N.O.S (HEXAMETHYLENEDIAMINE, DIETHYLENETRIAMINE) |
| Proper shipping name (DOT) | AMINES, LIQUID, CORROSIVE, N.O.S or POLYAMINES, LIQUID, CORROSIVE, N.O.S (HEXAMETHYLENEDIAMINE, DIETHYLENETRIAMINE) |

**Transport hazard class(es)**

| TDG class | 8 |
| TDG label(s) | 8 |
| IMDG Class | 8 |
| ICAO class/division | 8 |

**Transport labels**

- 

**Packing group**

| TDG Packing Group | III |
| IMDG packing group | III |
EZ-SPRAY CERAMIC HARDENER

ICAO packing group  III
DOT packing group  III

Environmental hazards

Environmentally Hazardous Substance
No.

Special precautions for user
EmS  F-A, S-B

Transport in bulk according to
Annex II of MARPOL 73/78
and the IBC Code
No information required.

15. Regulatory information

16. Other information

Revision date  4/5/2019
Revision  0
SDS No.  20879

Hazard statements in full
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.