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

1.1. Product identifier
Product name: FLEXANE 80/94L HARDENER
Product number: X0023

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Hardener.

1.3. 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
mail@itwpp.com

1.4. Emergency telephone number
Emergency telephone: +44(0)1235 239 670 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification (EC 1272/2008)
Physical hazards: Not Classified
Health hazards: Acute Tox. 4 - H302 Eye Irrit. 2 - H319 STOT RE 2 - H373
Environmental hazards: Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

2.2. Label elements
Pictogram

Signal word: Warning
Hazard statements: H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.
FLEXANE 80/94L HARDENER

Precautionary statements
P273 Avoid release to the environment.
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.
P314 Get medical advice/ attention if you feel unwell.
P501 Dispose of contents/ container in accordance with national regulations.

Contains
DIETHYLMETHYLBENZENEDIAMINE

Supplementary precautionary statements
P260 Do not breathe vapour/ spray.
P264 Wash contaminated skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P330 Rinse mouth.
P337+P313 If eye irritation persists: Get medical advice/ attention.
P391 Collect spillage.

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>Component</th>
<th>Concentration</th>
<th>CAS number</th>
<th>EC number</th>
<th>M factor (Acute)</th>
<th>M factor (Chronic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIETHYLMETHYLBENZENEDIAMINE</td>
<td>30-60%</td>
<td>68479-98-1</td>
<td>270-877-4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>CARBON BLACK</td>
<td>&lt;1%</td>
<td>1333-86-4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Classification
Acute Tox. 4 - H302
Acute Tox. 4 - H312
Eye Irrit. 2 - H319
STOT RE 2 - H373
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
Avoid contact with eyes. 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. Get medical attention if any discomfort continues.

Ingestion
Do not induce vomiting. Give plenty of water to drink. Get medical attention.

Skin contact
Remove contaminated clothing immediately and wash skin with soap and water.
**FLEXANE 80/94L HARDENER**

**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 irritation persists after washing.

### 4.2. 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.

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

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

<table>
<thead>
<tr>
<th>SECTION 5: Firefighting measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5.1. Extinguishing media</strong></td>
</tr>
<tr>
<td>Suitable extinguishing media</td>
</tr>
<tr>
<td><strong>5.2. Special hazards arising from the substance or mixture</strong></td>
</tr>
<tr>
<td>Specific hazards</td>
</tr>
<tr>
<td><strong>5.3. Advice for firefighters</strong></td>
</tr>
<tr>
<td>Protective actions during firefighting</td>
</tr>
<tr>
<td>Special protective equipment for firefighters</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTION 6: Accidental release measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>6.1. Personal precautions, protective equipment and emergency procedures</strong></td>
</tr>
<tr>
<td>Personal precautions</td>
</tr>
<tr>
<td><strong>6.2. Environmental precautions</strong></td>
</tr>
<tr>
<td>Environmental precautions</td>
</tr>
<tr>
<td><strong>6.3. Methods and material for containment and cleaning up</strong></td>
</tr>
<tr>
<td>Methods for cleaning up</td>
</tr>
<tr>
<td><strong>6.4. Reference to other sections</strong></td>
</tr>
<tr>
<td>Reference to other sections</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTION 7: Handling and storage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>7.1. Precautions for safe handling</strong></td>
</tr>
<tr>
<td>Usage precautions</td>
</tr>
<tr>
<td><strong>7.2. Conditions for safe storage, including any incompatibilities</strong></td>
</tr>
<tr>
<td>Storage precautions</td>
</tr>
</tbody>
</table>
FLEXANE 80/94L HARDENER

7.3. Specific end use(s)
Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters
Occupational exposure limits
CARBON BLACK
Long-term exposure limit (8-hour TWA): 3.5 mg/m³

Ingredient comments No exposure limits known for ingredient(s).

8.2. Exposure controls
Protective equipment
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. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection It is recommended that chemical-resistant, impervious gloves are worn. It is recommended that gloves are made of the following material: Neoprene. It is recommended that gloves are made of the following material: Nitrile rubber. To protect hands from chemicals, gloves should comply with European Standard EN374. 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. Promptly remove any clothing that becomes wet or contaminated.

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. Wear a respirator fitted with the following cartridge: Gas filter, type A2. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties
Appearance Liquid.
Colour Black.
Odour Slight.
FLEXANE 80/94L HARDENER

pH
pH (concentrated solution): 8.5 @ 25 ºC

Melting point
n/d ºC

Initial boiling point and range
>232 ºC @

Flash point
>177 ºC

Vapour density
<1

Relative density
1.08 @ 20 ºC

Viscosity
160-320 mPa s @ 25 ºC

9.2. Other information
Other information
Not available.

SECTION 10: Stability and reactivity

10.1. Reactivity
Reactivity
Acids. Strong oxidising agents.

10.2. Chemical stability
Stability
Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions
Possibility of hazardous reactions
Not available.

10.4. Conditions to avoid
Conditions to avoid
Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials
Materials to avoid
Avoid contact with the following materials: Acids. Oxidising agents.

10.6. Hazardous decomposition products
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.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity - oral
ATE oral (mg/kg) 1,461.43

Acute toxicity - dermal
ATE dermal (mg/kg) 3,215.15

Inhalation
Irritating to respiratory system. Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Ingestion
Harmful if swallowed.

Skin contact
Irritating to skin. Harmful in contact with skin.

Eye contact
Irritating to eyes.

SECTION 12: Ecological Information
FLEXANE 80/94L HARDENER

Ecotoxicity
Avoid releasing into the environment. The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

12.1. Toxicity
Toxicity
Very toxic to aquatic organisms.

12.2. Persistence and degradability
Persistence and degradability
The product is not readily biodegradable.

12.3. Bioaccumulative potential
Bioaccumulative potential
No data available on bioaccumulation.

12.4. Mobility in soil
Mobility
Not considered mobile.

12.5. Results of PBT and vPvB assessment
Results of PBT and vPvB assessment
This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects
Other adverse effects
Not available.

SECTION 13: Disposal considerations

13.1. 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

SECTION 14: Transport information

General
The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

Road transport notes
Refer to the Dangerous Goods List for information on any Special Provisions 375.

Rail transport notes
Refer to the Dangerous Goods List for information on any Special Provisions 375.

Sea transport notes
Refer to the Dangerous Goods List for information on any Special Provisions IMDG 2.10.2.7.

Air transport notes
Refer to the Dangerous Goods List for information on any Special Provisions 375.

14.1. UN number
Not applicable.

14.2. UN proper shipping name
Not applicable.

14.3. Transport hazard class(es)
No transport warning sign required.

14.4. Packing group
Not applicable.
14.5. Environmental hazards
Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user
Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.

SECTION 15: Regulatory information

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

15.2. Chemical safety assessment
No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date 03/04/2018
Revision 15
Supersedes date 25/04/2017
Hazard statements in full
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H319 Causes serious eye irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic 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.