SAFETY DATA SHEET
Clear Digoutable Polyester Resin, Part A

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

1.1. Product identifier
Product name Clear Digoutable Polyester Resin, Part A
Product number PE7501A, EPE7501RP250G, ZE

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses Resin.
Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet
Supplier ELECTROLUBE. A division of HK WENTWORTH LTD
ASHBY PARK, COALFIELD WAY,
ASHBY DE LA ZOUCH, LEICESTERSHIRE LE65 1JR
UNITED KINGDOM
+44 (0)1530 419600
+44 (0)1530 416640
info@hkw.co.uk

1.4. Emergency telephone number
Emergency telephone +44 1865 407333

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification (EC 1272/2008)
Physical hazards Not Classified
Health hazards Not Classified
Environmental hazards Not Classified

2.2. Label elements
Hazard statements NC Not Classified

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
Composition comments None of the ingredients are required to be listed.

SECTION 4: First aid measures

4.1. Description of first aid measures
Clear Digoutable Polyester Resin, Part A

General information
Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.

Inhalation
Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.

Ingestion
Rinse mouth thoroughly with water. Remove any dentures. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.

Skin contact
Remove affected person from source of contamination. Rinse immediately with plenty of water.

Eye contact
Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.

Protection of first aiders
First aid personnel should wear appropriate protective equipment during any rescue.

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

General information
See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation
Prolonged inhalation of high concentrations may damage respiratory system.

Ingestion
Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.

Skin contact
Prolonged contact may cause dryness of the skin.

Eye contact
May cause temporary eye irritation.

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

Notes for the doctor
Treat symptomatically.

Specific treatments
No special treatment required.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture
Specific hazards
Containers can burst violently or explode when heated, due to excessive pressure build-up.

Hazardous combustion products
Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

5.3. Advice for firefighters
Protective actions during firefighting
Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak.
Clear Digoutable Polyester Resin, Part A

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage.

6.2. Environmental precautions

Environmental precautions

Avoid discharge to the aquatic environment. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Reuse or recycle products wherever possible. Approach the spillage from upwind. Small Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Large Spillages: If leakage cannot be stopped, evacuate area. Flush spilled material into an effluent treatment plant, or proceed as follows. Contain and absorb spillage with sand, earth or other non-combustible material. Place waste in labelled, sealed containers. Clean contaminated objects and areas thoroughly, observing environmental regulations. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

6.4. Reference to other sections

Reference to other sections

For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists.

Advice on general occupational hygiene

Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store away from incompatible materials (see Section 10). Store in accordance with local regulations.

Storage class

Unspecified storage.

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.
8.1. Control parameters

Occupational exposure limits

Cyclohexanone

Long-term exposure limit (8-hour TWA): WEL 10 ppm  41 mg/m³
Short-term exposure limit (15-minute):  WEL 20 ppm  82 mg/m³
Sk
WEL = Workplace Exposure Limit
Sk = Can be absorbed through the skin.

8.2. Exposure controls

Protective equipment

Appropriate engineering controls
Provide adequate ventilation. Good general ventilation should be adequate to control worker exposure to airborne contaminants.

Eye/face protection
Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. The following protection should be worn: Chemical splash goggles.

Hand protection
Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and body protection
Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

Hygiene measures
Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.

Respiratory protection
Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.

Environmental exposure controls
Not regarded as dangerous for the environment.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance
Liquid.

Colour
Colourless to pale yellow.

Odour
Not known.

Odour threshold
Not available.

pH
Not available.
Clear Digoutable Polyester Resin, Part A

Melting point Not available.
Initial boiling point and range Not available.
Flash point Not available.
Evaporation rate Not available.
Evaporation factor Not available.
Flammability (solid, gas) Not available.
Upper/lower flammability or explosive limits Not available.
Other flammability Not available.
Vapour pressure Not available.
Vapour density Not available.
Relative density Not available.
Bulk density 1 kg/l
Solubility(ies) Not available.
Partition coefficient Not available.
Auto-ignition temperature Not available.
Decomposition Temperature Not available.
Viscosity 4500 mPa s @ 23°C/73.4°F
Explosive properties Not considered to be explosive.
Oxidising properties Does not meet the criteria for classification as oxidising.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity
Reactivity See the other subsections of this section for further details.

10.2. Chemical stability
Stability Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions
Possibility of hazardous reactions No potentially hazardous reactions known.

10.4. Conditions to avoid
Conditions to avoid There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials
Materials to avoid No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products
Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.
## Clear Digoutable Polyester Resin, Part A

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Toxicological effects</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toxicological effects</strong></td>
<td>Not regarded as a health hazard under current legislation.</td>
</tr>
<tr>
<td><strong>Acute toxicity - oral</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Notes (oral LD₅₀)</td>
<td></td>
</tr>
<tr>
<td><strong>Acute toxicity - dermal</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Notes (dermal LD₅₀)</td>
<td></td>
</tr>
<tr>
<td><strong>Acute toxicity - inhalation</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Notes (inhalation LC₅₀)</td>
<td></td>
</tr>
<tr>
<td><strong>Skin corrosion/irritation</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Animal data</td>
<td></td>
</tr>
<tr>
<td><strong>Serious eye damage/irritation</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Respiratory sensitisation</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Skin sensitisation</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Germ cell mutagenicity</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Genotoxicity - in vitro</td>
<td></td>
</tr>
<tr>
<td><strong>Carcinogenicity</strong></td>
<td>Contains a substance which may be potentially carcinogenic. IARC Group 3 Not classifiable as to its carcinogenicity to humans.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td></td>
</tr>
<tr>
<td>IARC carcinogenicity</td>
<td></td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Reproductive toxicity - fertility</td>
<td></td>
</tr>
<tr>
<td>Reproductive toxicity - development</td>
<td></td>
</tr>
<tr>
<td>Specific target organ toxicity - single exposure</td>
<td>Not classified as a specific target organ toxicant after a single exposure.</td>
</tr>
<tr>
<td>STOT - single exposure</td>
<td></td>
</tr>
<tr>
<td>Specific target organ toxicity - repeated exposure</td>
<td>Not classified as a specific target organ toxicant after repeated exposure.</td>
</tr>
<tr>
<td>STOT - repeated exposure</td>
<td></td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td></td>
</tr>
<tr>
<td>General information</td>
<td>No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Prolonged inhalation of high concentrations may damage respiratory system.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Prolonged contact may cause dryness of the skin.</td>
</tr>
</tbody>
</table>
Clear Digoutable Polyester Resin, Part A

Eye contact May cause temporary eye irritation.
Route of entry Ingestion Inhalation Skin and/or eye contact
Target organs No specific target organs known.

SECTION 12: Ecological Information

Ecotoxicity Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity
Toxicity Based on available data the classification criteria are not met.

12.2. Persistence and degradability
Persistence and degradability The degradability of the product is not known.

12.3. Bioaccumulative potential
Bioaccumulative potential No data available on bioaccumulation.
Partition coefficient Not available.

12.4. Mobility In soil
Mobility No data available.

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects
Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
General information The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

Disposal methods Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority.

SECTION 14: Transport information

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.
Clear Digoutable Polyester Resin, Part A

**Transport labels**
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**

**National regulations**
- Health and Safety at Work etc. Act 1974 (as amended).
- The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
- EH40/2005 Workplace exposure limits.

**EU legislation**

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

**Inventories**

**EU - EINECS/ELINCS**
None of the ingredients are listed or exempt.

### SECTION 16: Other information
Clear Digoutable Polyester Resin, Part A

**Abbreviations and acronyms used in the safety data sheet**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
IATA: International Air Transport Association.
IMDG: International Maritime Dangerous Goods.
CAS: Chemical Abstracts Service.
ATE: Acute Toxicity Estimate.
LC₅₀: Lethal Concentration to 50% of a test population.
LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
EC₅₀: 50% of maximal Effective Concentration.
PBT: Persistent, Bioaccumulative and Toxic substance.
vPvB: Very Persistent and Very Bioaccumulative.

**Training advice**

Read and follow manufacturer's recommendations. Only trained personnel should use this material.

**Issued by**

Bethany Turner

**Revision date**

11/09/2017

**Revision**

0

**SDS number**

2068

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.
SAFETY DATA SHEET
Clear Digoutable Polyester Resin, Part B

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

1.1. Product identifier
Product name: Clear Digoutable Polyester Resin, Part B
Product number: PE7501B, EPE7501RP250G, ZE

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Hardener.
Uses advised against: No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet
Supplier: ELECTROLUBE, a division of HK WENTWORTH LTD
ASHBY PARK, COALFIELD WAY, ASHBY DE LA ZOUCH, LEICESTERSHIRE LE65 1JR UNITED KINGDOM
+44 (0)1530 419600
+44 (0)1530 416640
info@hkw.co.uk

1.4. Emergency telephone number
Emergency telephone: +44 1865 407333

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification (EC 1272/2008)
Physical hazards: Not Classified
Health hazards: Not Classified
Environmental hazards: Not Classified

2.2. Label elements
Hazard statements: NC Not Classified

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
## Clear Digoutable Polyester Resin, Part B

### 2,4,6-Tris(dimethylaminomethyl)phenol

|---------------------|----------------------|--------------------------------------------------|

**Classification**
- Acute Tox. 4 - H302
- Skin Irrit. 2 - H315
- Eye Irrit. 2 - H319

### Cyclohexanone

<table>
<thead>
<tr>
<th>CAS number: 108-94-1</th>
<th>EC number: 203-631-1</th>
<th>REACH registration number: 01-2119453616-35-XXXX</th>
</tr>
</thead>
</table>

**Classification**
- Flam. Liq. 3 - H226
- Acute Tox. 4 - H332

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**
Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.

**Inhalation**
Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.

**Ingestion**
Rinse mouth thoroughly with water. Remove any dentures. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.

**Skin contact**
Remove affected person from source of contamination. Rinse immediately with plenty of water.

**Eye contact**
Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.

**Protection of first aiders**
First aid personnel should wear appropriate protective equipment during any rescue.

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

**General information**
See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation**
Prolonged inhalation of high concentrations may damage respiratory system.

**Ingestion**
Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.

**Skin contact**
Prolonged contact may cause dryness of the skin.

**Eye contact**
May cause temporary eye irritation.

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

**Notes for the doctor**
Treat symptomatically.
Clear Digoutable Polyester Resin, Part B

Specific treatments
No special treatment required.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture
Specific hazards
Containers can burst violently or explode when heated, due to excessive pressure build-up.

Hazardous combustion products
Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

5.3. Advice for firefighters
Protective actions during firefighting
Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Personal precautions
No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage.

6.2. Environmental precautions
Environmental precautions
Avoid discharge to the aquatic environment. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up
Methods for cleaning up
Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Reuse or recycle products wherever possible. Approach the spillage from upwind. Small Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Large Spillages: If leakage cannot be stopped, evacuate area. Flush spilled material into an effluent treatment plant, or proceed as follows. Contain and absorb spillage with sand, earth or other non-combustible material. Place waste in labelled, sealed containers. Clean contaminated objects and areas thoroughly, observing environmental regulations. The contaminated absorbent may pose the same hazard as the spilled material. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

6.4. Reference to other sections
Reference to other sections
For personal protection, see Section 8. For waste disposal, see Section 13.
Clear Digoutable Polyester Resin, Part B

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions
Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists.

Advice on general occupational hygiene
Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions
Store away from incompatible materials (see Section 10). Store in accordance with local regulations.

Storage class
Chemical storage.

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

Cyclohexanone
Long-term exposure limit (8-hour TWA): WEL 10 ppm  41 mg/m³
Short-term exposure limit (15-minute):  WEL 20 ppm  82 mg/m³
Sk
WEL = Workplace Exposure Limit
Sk = Can be absorbed through the skin.

8.2. Exposure controls

Protective equipment

Appropriate engineering controls
Provide adequate ventilation. Good general ventilation should be adequate to control worker exposure to airborne contaminants.

Eye/face protection
Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. The following protection should be worn: Chemical splash goggles.

Hand protection
Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and body protection
Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
Hygiene measures

Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.

Environmental exposure controls

Not regarded as dangerous for the environment.

SECTION 9: Physical and Chemical Properties

9.1. 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>Colour</td>
<td>Colourless to pale yellow.</td>
</tr>
<tr>
<td>Odour</td>
<td>Not known</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Initial boiling point and range</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
<tr>
<td>Evaporation factor</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Upper/lower flammability or</td>
<td>Not available.</td>
</tr>
<tr>
<td>explosive limits</td>
<td></td>
</tr>
<tr>
<td>Other flammability</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Bulk density</td>
<td>1.04 kg/l</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>5600 mPa s @ 23°C/73.4°F</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not considered to be explosive.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Does not meet the criteria for classification as oxidising.</td>
</tr>
</tbody>
</table>

9.2. Other information
# Clear Digoutable Polyester Resin, Part B

## SECTION 10: Stability and reactivity

### 10.1. Reactivity
Reactivity
See the other subsections of this section for further details.

### 10.2. Chemical stability
Stability
Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

### 10.3. Possibility of hazardous reactions
Possibility of hazardous reactions
No potentially hazardous reactions known.

### 10.4. Conditions to avoid
Conditions to avoid
There are no known conditions that are likely to result in a hazardous situation.

### 10.5. Incompatible materials
Materials to avoid
No specific material or group of materials is likely to react with the product to produce a hazardous situation.

### 10.6. Hazardous decomposition products
Hazardous decomposition products
Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects
Toxicological effects
Not regarded as a health hazard under current legislation.

**Acute toxicity - oral**

Notes (oral LD₅₀)
Based on available data the classification criteria are not met.

ATE oral (mg/kg)
35,033.63

**Acute toxicity - dermal**

Notes (dermal LD₅₀)
Based on available data the classification criteria are not met.

**Acute toxicity - inhalation**

Notes (inhalation LC₅₀)
Based on available data the classification criteria are not met.

ATE inhalation (gases ppm)
420,403.59

ATE inhalation (vapours mg/l)
1,027.65

ATE inhalation (dusts/mists mg/l)
140.13

Skin corrosion/irritation
Animal data
Based on available data the classification criteria are not met.

**Serious eye damage/irritation**

Serious eye damage/irritation
Based on available data the classification criteria are not met.

**Respiratory sensitisation**

Respiratory sensitisation
Based on available data the classification criteria are not met.

Skin sensitisation
Skin sensitisation
Based on available data the classification criteria are not met.
Clear Digoutable Polyester Resin, Part B

Germ cell mutagenicity
Genotoxicity - in vitro
Based on available data the classification criteria are not met.

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

IARC carcinogenicity
Contains a substance which may be potentially carcinogenic. IARC Group 3 Not classifiable as to its carcinogenicity to humans.

Reproductive toxicity
Reproductive toxicity - fertility
Based on available data the classification criteria are not met.
Reproductive toxicity - development
Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure
STOT - single exposure
Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure
STOT - repeated exposure
Not classified as a specific target organ toxicant after repeated exposure.

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

General information
No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation
Prolonged inhalation of high concentrations may damage respiratory system.

Ingestion
Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.

Skin contact
Prolonged contact may cause dryness of the skin.

Eye contact
May cause temporary eye irritation.

Route of entry
Ingestion Inhalation Skin and/or eye contact

Target organs
No specific target organs known.

2,4,6-Tris(dimethylaminomethyl)phenol

Acute toxicity - oral
ATE oral (mg/kg) 500.0

Cyclohexanone

Acute toxicity - inhalation
ATE inhalation (gases ppm) 4,500.0
ATE inhalation (vapours mg/l) 11.0
ATE inhalation (dusts/mists mg/l) 1.5

Carcinogenicity
IARC carcinogenicity
IARC Group 3 Not classifiable as to its carcinogenicity to humans.
Clear Digoutable Polyester Resin, Part B

SECTION 12: Ecological Information

Ecotoxicity
Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity
Toxicity
Based on available data the classification criteria are not met.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Acute toxicity - fish</th>
<th>Biodegradation</th>
<th>Bioaccumulative potential</th>
<th>Mobility</th>
<th>Results of PBT and vPvB assessment</th>
<th>Other adverse effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyclohexanone</td>
<td>Data lacking.</td>
<td>Data lacking.</td>
<td>Data lacking.</td>
<td>No data available.</td>
<td>This product does not contain any substances classified as PBT or vPvB.</td>
<td>None known.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
Persistence and degradability
The degradability of the product is not known.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Biodegradation</th>
<th>Bioaccumulative potential</th>
<th>Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyclohexanone</td>
<td>Data lacking.</td>
<td>Data lacking.</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Substance</th>
<th>Bioaccumulative potential</th>
<th>Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyclohexanone</td>
<td>Data lacking.</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil
Mobility
No data available.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyclohexanone</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

12.5. 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
None known.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Other adverse effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyclohexanone</td>
<td>Not known.</td>
</tr>
</tbody>
</table>

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Clear Digoutable Polyester Resin, Part B

**General information**
The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

**Disposal methods**
Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority.

### SECTION 14: Transport information

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

**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.

**Transport labels**
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

### SECTION 15: Regulatory information

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
**National regulations**
Health and Safety at Work etc. Act 1974 (as amended).
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EH40/2005 Workplace exposure limits.
Clear Digoutable Polyester Resin, Part B

EU legislation

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

Inventories
EU - EINECS/ELINCS
None of the ingredients are listed or exempt.

Korea - KECl
Present.

SECTION 16: Other information

<table>
<thead>
<tr>
<th>Abbreviations and acronyms used in the safety data sheet</th>
<th>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.</td>
</tr>
<tr>
<td></td>
<td>RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.</td>
</tr>
<tr>
<td></td>
<td>IATA: International Air Transport Association.</td>
</tr>
<tr>
<td></td>
<td>IMDG: International Maritime Dangerous Goods.</td>
</tr>
<tr>
<td></td>
<td>CAS: Chemical Abstracts Service.</td>
</tr>
<tr>
<td></td>
<td>ATE: Acute Toxicity Estimate.</td>
</tr>
<tr>
<td></td>
<td>LC₅₀: Lethal Concentration to 50 % of a test population.</td>
</tr>
<tr>
<td></td>
<td>LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).</td>
</tr>
<tr>
<td></td>
<td>EC₅₀: 50% of maximal Effective Concentration.</td>
</tr>
<tr>
<td></td>
<td>PBT: Persistent, Bioaccumulative and Toxic substance.</td>
</tr>
<tr>
<td></td>
<td>vPvB: Very Persistent and Very Bioaccumulative.</td>
</tr>
</tbody>
</table>

Training advice
Read and follow manufacturer's recommendations. Only trained personnel should use this material.

Issued by
Bethany Turner

Revision date
12/09/2017

Revision
0

SDS number
2078

Hazard statements in full
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.

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.