1. Identification of the substance/mixture and of the company/undertaking

1.1. Product Details
Product Code : E131
Name : Ossila Encapsulation Epoxy
REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration or the annual tonnage does not require a registration.

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

1.3. Supplier details
Supplied by : Ossila Limited
Kroto Innovation Centre
Broad Lane, Sheffield
S3 7HQ, UK
Telephone : 0114 213 2770
Email address : info@ossila.com

2. Hazards identification

2.1. Classification of the substance or mixture
Hazard statements according to Regulation (EC) 1272/2008
Acute Toxicity (Category 4), H302
Skin irritation (Category 2), H315
Eye irritation (Category 2), H319

Hazard statements defined under EU Directive 67/548/EE or 1999/45/EC:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xn</td>
<td>Harmful</td>
<td>R22, R36/37/38</td>
</tr>
</tbody>
</table>

2.2. Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

Signal word : Warning

Hazard statement(s)
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statement(s)
P302 + P352 If on skin: Wash with plenty of soap and water for several minutes.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation occurs: Get medical advice/attention.

**Supplemental Hazard Statements**

**2.3. Other hazards**

None.

**3. Composition/Information on ingredients**

**3.2. Mixtures**

Synonyms : None

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy resin</td>
<td>Proprietary</td>
<td>Acute Tox. 4 *, Skin Irrit. 2; Eye Irrit. 2; H302, H315, H319</td>
</tr>
<tr>
<td>Photoinitiators</td>
<td>Proprietary</td>
<td>Acute Tox. 4 *, Skin Irrit. 2; Eye Irrit. 2; H302, H315, H319</td>
</tr>
<tr>
<td>Photostabilisers</td>
<td>Proprietary</td>
<td>Acute Tox. 4 *, Skin Irrit. 2; Eye Irrit. 2; H302, H315, H319</td>
</tr>
</tbody>
</table>

**4. First aid measures**

**4.1. Description of first aid measures**

**After Inhalation**
If inhaled, remove to fresh air. If not breathing give artificial respiration. Call a physician.

**After skin contact**
In case of skin contact, wash with soap and flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

**After eye contact**
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

**After Ingestion**
If swallowed, wash out mouth with water. Call a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

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

No data available.
5. Fire fighting

5.1. Extinguishing media
Use agent most appropriate to extinguish fire. In case of small fire, use “alcohol” foam, dry chemical or carbon dioxide. For large fires apply water from as safe a distance as possible. Use very large quantities or spraying water opposed to a solid stream.

5.2. Special hazards arising from the substance or mixture
Hazardous combustion products
Carbon oxides, nitrogen oxides.

5.3. Advice for firefighters
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases and vapours may be generated by thermal decomposition.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Wear personal protective equipment. Avoid breathing in vapours, mist, gas or dust. Ensure room is well ventilated. Remove all sources of ignition.

6.2. Environmental precautions
Do not let product enter drains.

6.3. Containment and cleaning:
Contain using saw dust to soak up and place in container for proper disposal if safe to do so according to local regulations.

7. Handling and storage

7.1. Precautions for safe handling
Avoid contact with eyes, skin, and clothing. Avoid inhalation of vapour during use and curing processes. Keep away from sources of ignition and avoid the build of electrostatic charge. In case of an accident or if you are feeling unwell, immediately seek medical advice.

7.2. Conditions for safe storage, including any incompatibilities
Store in a cool, dry and well-ventilated place inside of a tightly sealed container. Reseal containers that have been opened and keep upright to prevent leakage. Keep away from sources of heat. Light sensitive. Store in the dark.

7.3. Specific end uses
Use in laboratories.

8. Exposure controls / Personal protection

8.1. Control parameters
Components with workplace control parameters
Contains no substances with occupational exposure limit values.
8.2. Exposure controls

Engineering measures

Handle in accordance with good industrial practices for hygiene and safety. Ensure eyewash stations and safety showers are close to the laboratory workstation.

Personal protective equipment

Eyes: Wear safety glasses with side-shields conforming to appropriate government standards such as NOISH (US) or EN166 (EU).

Skin: Handle with appropriate gloves and use proper glove removal technique to avoid skin contact. Dispose of gloves in accordance with applicable laws. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Clothing: Wear complete suit protecting against chemicals; the type of equipment should be appropriate for the concentration and amount of dangerous substance used.

Respirators: A respiratory protection program that meets OSHA’s 29 CFR §1910.134 and ANSI Z88.2 requirements or European standard EN 149 must be followed whenever workplace conditions warrant a respirator’s use.

General hygiene measures

Wash thoroughly after handling. Wash contaminated clothing before reuse.

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>Amber, viscous liquid</td>
</tr>
<tr>
<td>Odour</td>
<td>Sweet</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Glass transition temperature</td>
<td>130°C</td>
</tr>
<tr>
<td>Flash point</td>
<td>93°C</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour density</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.17</td>
</tr>
<tr>
<td>Water solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No data available</td>
</tr>
<tr>
<td>n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Approx. 300 cps (at 23 °C)</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other safety information

No data available.
10. Stability and reactivity

10.1 Reactivity
No data available.

10.2. Chemical stability
Stable under normal temperatures and pressures under recommended storage conditions.

10.3. Possibility of hazardous reactions
Hazardous polymerisation may occur if heated or brought into contact with tin, brass, copper.

10.4. Conditions to avoid
Exposure to light/sunlight and heat.

10.5. Incompatible materials
Strong acids or bases, strong oxidising agents, tin, brass, copper.

10.6. Hazardous decomposition products
Not determined.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity
Harmful if swallowed.

Skin corrosion/irritation
Causes skin irritation.

Serious eye damage/eye irritation
Causes serious eye irritation.

Respiratory or skin sensitization
Based on available data the classification criteria are not met.

Germ cell mutagenicity
No data available.

Carcinogenicity
No data available.

Reproductive toxicity
No data available.

Specific target organ toxicity - single exposure
No data available.

Specific target organ toxicity - repeated exposure
No data available.

Aspiration hazard
No data available.

Potential health effects

<table>
<thead>
<tr>
<th>Route</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>No data available.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Harmful if swallowed.</td>
</tr>
<tr>
<td>Skin</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>Eyes</td>
<td>Causes serious eye irritation.</td>
</tr>
</tbody>
</table>

Signs and Symptoms of Exposure
No data available.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
12. Ecological information

12.1. Toxicity
No data available.

12.2. Persistence and degradability
No data available.

12.3. Bioaccumulative potential
No data available.

12.4. Mobility in soil
No data available.

12.5. Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted, but substance is not considered (very) persistent, (very) bioaccumulative and toxic (PBT/vPvB).

12.6. Other adverse effects
No data available.

13. Disposal

13.1. Waste treatment methods

Product
Burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations and in accordance with European Directives on waste and hazardous waste. Offer surplus material to a licensed professional waste disposal professional.

Contaminated packaging
Dispose of as unused product.

14. Transport
Non-hazardous for road, air and sea transport.

IATA: Not regulated as a hazardous material.
IMO: Not regulated as a hazardous material.
RID/ADR: Not regulated as a hazardous material.

16. Other information

Warranty
This material is for research and development use only. The information provided here is based upon the available information from material suppliers but not warranted as complete and is provided only as a guide. Ossila Limited shall not be held responsible for any damage resulting from use or handling of this product.