

## LIC20 EPOXY ENAMEL BASE

### 1. Identification of the material and supplier

**Product name** : LIC20 EPOXY ENAMEL BASE

**ADG** : Paint (solvent naphtha (petroleum), light arom. A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C8 through C10 and boiling in the range of approximately 135 °C to 210 °C (275 °F to 410 °F).)

**Company Identification** De Beer Australasia Pty Ltd  
Unit 11, 8 Kerta Road  
Kincumber, NSW, Australia  
Phone 0243684054

**Emergency telephone number** **Poisons Information Centre: Australia 131 126**

#### Uses

**Area of application** : Industrial applications, Used by spraying.

**Product type** : Liquid.

### 2. Hazards identification

**Classification** : F; R11  
Xn; R20/21, R65  
Xi; R36/38  
R43  
R52/53

**Risk phrases** : R11- Highly flammable.  
R20/21- Harmful by inhalation and in contact with skin.  
R65- Harmful: may cause lung damage if swallowed.  
R36/38- Irritating to eyes and skin.  
R43- May cause sensitization by skin contact.  
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety phrases** : S16- Keep away from sources of ignition - No smoking.  
S23- Do not breathe vapor or spray.  
S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S36/37- Wear suitable protective clothing and gloves.  
S38- In case of insufficient ventilation, wear suitable respiratory equipment.  
S61- Avoid release to the environment. Refer to special instructions/safety data sheet.

**Statement of hazardous/dangerous nature** : HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

### 3. Composition/information on ingredients

**Mixture** : Yes.

| Ingredient name   | CAS number | Concentration |
|---|------------|---------------|
| solvent naphtha (petroleum), light arom. A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C8 through C10 and boiling in the range of approximately 135 °C to 210 °C (275 °F to 410 °F). | 64742-95-6 | 12.5 - 25     |
| xylene  | 1330-20-7  | 12.5 - 25     |
| heptan-2-one  | 110-43-0   | 5 - 12.5      |
| ethanol   | 64-17-5    | 5 - 12.5      |
| 3,6-diazaoctanethylenediamin  | 112-24-3   | 5 - 12.5      |
| ethylbenzene  | 100-41-4   | 1 - 5         |
| toluene   | 108-88-3   | 0 - 1         |

### 3 . Composition/information on ingredients

|                    |          |       |
|--------------------|----------|-------|
| di-isobutyl ketone | 108-83-8 | 0 - 1 |
| benzene            | 71-43-2  | 0 - 1 |

Other ingredients, determined not to be hazardous according to NOHSC criteria, and not dangerous according to the ADG Code, make up the product concentration to 100%.

**There are no ingredients or additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

### 4 . First aid measures

#### First aid measures

- Inhalation** : Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing or wear gloves.
- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

### 5 . Fire-fighting measures

#### Extinguishing media

- Suitable** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. This material is harmful to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Highly flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

## **5 . Fire-fighting measures**

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon oxides  
nitrogen oxides

## **6 . Accidental release measures**

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

## **7 . Handling and storage**

- Handling** : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## 8 . Exposure controls/personal protection

### Occupational exposure limits

#### Ingredient name

xylene

heptan-2-one

ethanol

ethylbenzene

toluene

di-isobutyl ketone

benzene

#### Exposure limits

**NOHSC (Australia, 8/2005).**

STEL: 655 mg/m<sup>3</sup>, 0 times per shift, 15 minute(s).

STEL: 150 ppm, 0 times per shift, 15 minute(s).

TWA: 350 mg/m<sup>3</sup>, 0 times per shift, 8 hour(s).

TWA: 80 ppm, 0 times per shift, 8 hour(s).

**NOHSC (Australia, 8/2005).**

TWA: 233 mg/m<sup>3</sup> 8 hour(s).

TWA: 50 ppm 8 hour(s).

**NOHSC (Australia, 8/2005).**

TWA: 1880 mg/m<sup>3</sup> 8 hour(s).

TWA: 1000 ppm 8 hour(s).

**NOHSC (Australia, 8/2005).**

STEL: 543 mg/m<sup>3</sup> 15 minute(s).

STEL: 125 ppm 15 minute(s).

TWA: 434 mg/m<sup>3</sup> 8 hour(s).

TWA: 100 ppm 8 hour(s).

**NOHSC (Australia, 8/2005). Skin**

STEL: 574 mg/m<sup>3</sup> 15 minute(s).

STEL: 150 ppm 15 minute(s).

TWA: 191 mg/m<sup>3</sup> 8 hour(s).

TWA: 50 ppm 8 hour(s).

**NOHSC (Australia, 8/2005).**

TWA: 145 mg/m<sup>3</sup> 8 hour(s).

TWA: 25 ppm 8 hour(s).

**NOHSC (Australia, 8/2005).**

TWA: 3.2 mg/m<sup>3</sup> 8 hour(s).

TWA: 1 ppm 8 hour(s).

### Recommended monitoring procedures

- : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

### Exposure controls

#### Engineering measures

- : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

#### Hygiene measures

- : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eyes

- : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

#### Hands

- : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

#### Respiratory

- : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

#### Skin

- : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

## 8 . Exposure controls/personal protection

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## 9 . Physical and chemical properties

**Physical state** : Liquid.  
**Flash point** : Closed cup: 15.5°C (59.9°F)  
**Solubility** : Insoluble in the following materials: cold water and hot water.

## 10 . Stability and reactivity

**Stability** : The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.  
**Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not swallow.  
**Materials to avoid** : oxidizing materials  
**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11 . Toxicological information

### Potential acute health effects

**Inhalation** : Harmful by inhalation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.  
**Ingestion** : Aspiration hazard if swallowed. Can enter lungs and cause damage. Irritating to mouth, throat and stomach.  
**Skin contact** : Harmful in contact with skin. Irritating to skin. May cause sensitization by skin contact.  
**Eye contact** : Irritating to eyes.

### Acute toxicity

| Product/ingredient name   | Result               | Species | Dose        | Exposure |
|---|----------------------|---------|-------------|----------|
| solvent naphtha (petroleum), light arom. A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C8 through C10 and boiling in the range of approximately 135 °C to 210 °C (275 °F to 410 °F). | LD50 Oral            | Rat     | 8400 mg/kg  | -        |
| xylene  | LD50 Dermal          | Rabbit  | >1700 mg/kg | -        |
|   | LD50 Intraperitoneal | Rat     | 2459 mg/kg  | -        |
|   | LD50 Oral            | Rat     | 4300 mg/kg  | -        |
|   | LD50 Subcutaneous    | Rat     | 1700 mg/kg  | -        |
| heptan-2-one  | LD50 Intraperitoneal | Rat     | 800 mg/kg   | -        |
|   | LD50 Oral            | Rat     | 1670 mg/kg  | -        |
| ethanol   | LD50 Intra-arterial  | Rat     | 11 mg/kg    | -        |
|   | LD50 Intraperitoneal | Rat     | 3600 ug/kg  | -        |
|   | LD50 Intravenous     | Rat     | 1440 mg/kg  | -        |
|   | LD50 Oral            | Rat     | 7060 mg/kg  | -        |
|   | LD50 Oral            | Rat     | 7 gm/kg     | -        |
|   | TDL0 Intravenous     | Rat     | 0.5 gm/kg   | -        |
|   |                      |         |             |          |

## 11 . Toxicological information

|  |                       |     |             |   |
|--|-----------------------|-----|-------------|---|
|  | TDL <sub>o</sub>      | Rat | 106 ug/kg   | - |
|  | Intracerebral         |     |             |   |
|  | TDL <sub>o</sub>      | Rat | 3500 mg/kg  | - |
|  | Intraperitoneal       |     |             |   |
|  | TDL <sub>o</sub>      | Rat | 2.45 gm/kg  | - |
|  | Intraperitoneal       |     |             |   |
|  | TDL <sub>o</sub>      | Rat | 363.6 ug/kg | - |
|  | Intracerebral         |     |             |   |
|  | TDL <sub>o</sub>      | Rat | 2 gm/kg     | - |
|  | Intraperitoneal       |     |             |   |
|  | TDL <sub>o</sub> Oral | Rat | 6.4 gm/kg   | - |
|  | TDL <sub>o</sub> Oral | Rat | 10 mL/kg    | - |
|  | TDL <sub>o</sub> Oral | Rat | 6.67 mL/kg  | - |
|  | TDL <sub>o</sub> Oral | Rat | 5 mL/kg     | - |
|  | TDL <sub>o</sub> Oral | Rat | 8000 mg/kg  | - |
|  | TDL <sub>o</sub> Oral | Rat | 6000 mg/kg  | - |
|  | TDL <sub>o</sub>      | Rat | 1.5 gm/kg   | - |
|  | Intraperitoneal       |     |             |   |
|  | TDL <sub>o</sub>      | Rat | 2.4 mg/kg   | - |
|  | Intraperitoneal       |     |             |   |
|  | TDL <sub>o</sub> Oral | Rat | 5250 mg/kg  | - |
|  | TDL <sub>o</sub> Oral | Rat | 5000 mg/kg  | - |
|  | TDL <sub>o</sub> Oral | Rat | 5000 mg/kg  | - |
|  | TDL <sub>o</sub> Oral | Rat | 4800 mg/kg  | - |
|  | TDL <sub>o</sub>      | Rat | 1 gm/kg     | - |
|  | Intraperitoneal       |     |             |   |
|  | TDL <sub>o</sub> Oral | Rat | 3 gm/kg     | - |
|  | TDL <sub>o</sub> Oral | Rat | 6 gm/kg     | - |
|  | TDL <sub>o</sub> Oral | Rat | 3 gm/kg     | - |
|  | TDL <sub>o</sub> Oral | Rat | 2.5 gm/kg   | - |
|  | TDL <sub>o</sub> Oral | Rat | 0.5 gm/kg   | - |
|  | TDL <sub>o</sub>      | Rat | 3000 mg/kg  | - |
|  | Intraperitoneal       |     |             |   |
|  | TDL <sub>o</sub> Oral | Rat | 5 gm/kg     | - |
|  | TDL <sub>o</sub> Oral | Rat | 1600 mg/kg  | - |
|  | TDL <sub>o</sub> Oral | Rat | 1500 mg/kg  | - |
|  | TDL <sub>o</sub>      | Rat | 3000 mg/kg  | - |
|  | Intraperitoneal       |     |             |   |
|  | TDL <sub>o</sub> Oral | Rat | 5.25 gm/kg  | - |
|  | TDL <sub>o</sub>      | Rat | 0.5 gm/kg   | - |
|  | Intraperitoneal       |     |             |   |
|  | TDL <sub>o</sub>      | Rat | 2700 mg/kg  | - |
|  | Intraperitoneal       |     |             |   |
|  | TDL <sub>o</sub>      | Rat | 1.25 mg/kg  | - |
|  | Intraperitoneal       |     |             |   |
|  | TDL <sub>o</sub>      | Rat | 1800 mg/kg  | - |
|  | Intraperitoneal       |     |             |   |
|  | TDL <sub>o</sub>      | Rat | 1000 mg/kg  | - |
|  | Intraperitoneal       |     |             |   |
|  | TDL <sub>o</sub>      | Rat | 500 mg/kg   | - |
|  | Intraperitoneal       |     |             |   |
| 3,6-diazaoctanethylenediamin<br>ethylbenzene | LD50 Oral             | Rat | 2500 mg/kg  | - |
|  | LD50 Oral             | Rat | 3500 mg/kg  | - |
|  | LD50 Oral             | Rat | 3500 mg/kg  | - |
|  | TDL <sub>o</sub>      | Rat | 1062 mg/kg  | - |
|  | Intraperitoneal       |     |             |   |
| toluene                                      | LD50                  | Rat | 1332 mg/kg  | - |
|  | Intraperitoneal       |     |             |   |
|  | LD50                  | Rat | 1960 mg/kg  | - |
|  | Intravenous           |     |             |   |
|  | LD50 Oral             | Rat | 636 mg/kg   | - |
|  | LD50 Unreported       | Rat | 6900 mg/kg  | - |
|  | LDLo                  | Rat | 2.5 mL/kg   | - |



## 11 . Toxicological information

|                    |                  |     |            |   |
|--------------------|------------------|-----|------------|---|
|                    | Intraperitoneal  |     |            |   |
|                    | TDL <sub>0</sub> | Rat | 600 mg/kg  | - |
|                    | Intraperitoneal  |     |            |   |
| di-isobutyl ketone | LD50 Oral        | Rat | 5750 mg/kg | - |
| benzene            | LD50             | Rat | 1100 ug/kg | - |
|                    | Intraperitoneal  |     |            |   |
|                    | LD50 Oral        | Rat | 930 mg/kg  | - |
|                    | LD50 Oral        | Rat | 1 mL/kg    | - |
|                    | LD50 Oral        | Rat | 1800 mg/kg | - |
|                    | LDLo             | Rat | 5 mg/kg    | - |
|                    | Subcutaneous     |     |            |   |

**Conclusion/Summary** : Not available.

### Potential chronic health effects

#### Chronic toxicity

**Conclusion/Summary** : Not available.

#### Carcinogenicity

**Conclusion/Summary** : Not available.

#### Mutagenicity

**Conclusion/Summary** : Not available.

#### Teratogenicity

**Conclusion/Summary** : Not available.

#### Reproductive toxicity

**Conclusion/Summary** : Not available.

#### Chronic effects

: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

#### Carcinogenicity

: No known significant effects or critical hazards.

#### Mutagenicity

: No known significant effects or critical hazards.

#### Teratogenicity

: No known significant effects or critical hazards.

#### Developmental effects

: No known significant effects or critical hazards.

#### Fertility effects

: No known significant effects or critical hazards.

### Over-exposure signs/symptoms

**Inhalation** : No specific data.

**Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting

**Skin** : Adverse symptoms may include the following:  
irritation  
redness

**Eyes** : Adverse symptoms may include the following:  
irritation  
watering  
redness

**Target organs** : Contains material which causes damage to the following organs: blood, kidneys, the reproductive system, liver, peripheral nervous system, gastrointestinal tract, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea, nose/sinuses, throat.

## 12 . Ecological information

**Environmental effects** : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### Aquatic ecotoxicity

| Product/ingredient name | Test | Result | Species | Exposure |
|-------------------------|------|--------|---------|----------|
|-------------------------|------|--------|---------|----------|

**12 . Ecological information**

|              |              |                       |         |          |
|--------------|--------------|-----------------------|---------|----------|
| xylene       | Mortality    | Acute LC50 13.4 mg/L  | Fish    | 96 hours |
|              | Mortality    | Acute LC50 13.3 mg/L  | Fish    | 96 hours |
|              | Mortality    | Acute LC50 12 mg/L    | Fish    | 96 hours |
|              | Mortality    | Acute LC50 8.6 mg/L   | Fish    | 96 hours |
|              | Mortality    | Acute LC50 8.2 mg/L   | Fish    | 96 hours |
|              | Mortality    | Acute LC50 3.3 mg/L   | Fish    | 96 hours |
| heptan-2-one | Mortality    | Acute LC50 131 mg/L   | Fish    | 96 hours |
| ethanol      | Intoxication | Acute EC50 >100 mg/L  | Daphnia | 48 hours |
|              | Intoxication | Acute EC50 9.3 mg/L   | Daphnia | 48 hours |
|              | Physiology   | Acute EC50 2 mg/L     | Daphnia | 48 hours |
|              | Mortality    | Acute LC50 13000 mg/L | Fish    | 96 hours |
|              | Mortality    | Acute LC50 >100 mg/L  | Fish    | 96 hours |
| ethylbenzene | Intoxication | Acute EC50 2.97 mg/L  | Daphnia | 48 hours |
|              | Intoxication | Acute EC50 2.93 mg/L  | Daphnia | 48 hours |
|              | Mortality    | Acute LC50 4.2 mg/L   | Fish    | 96 hours |
|              | Mortality    | Acute LC50 9.09 mg/L  | Fish    | 96 hours |
|              | Mortality    | Acute LC50 9.6 mg/L   | Fish    | 96 hours |
| toluene      | Intoxication | Acute EC50 6.56 mg/L  | Daphnia | 48 hours |
|              | Intoxication | Acute EC50 6 mg/L     | Daphnia | 48 hours |
|              | Mortality    | Acute LC50 6.78 mg/L  | Fish    | 96 hours |
|              | Mortality    | Acute LC50 12.6 mg/L  | Fish    | 96 hours |
|              | Mortality    | Acute LC50 5.8 mg/L   | Fish    | 96 hours |
| benzene      | Intoxication | Acute EC50 11.73 mg/L | Daphnia | 48 hours |
|              | Intoxication | Acute EC50 10 mg/L    | Daphnia | 48 hours |
|              | Intoxication | Acute EC50 9.23 mg/L  | Daphnia | 48 hours |
|              | Mortality    | Acute LC50 9.2 mg/L   | Fish    | 96 hours |
|              | Mortality    | Acute LC50 5.9 mg/L   | Fish    | 96 hours |
|              | Mortality    | Acute LC50 5.3 mg/L   | Fish    | 96 hours |

**Conclusion/Summary** : Not available.

**Other ecological information****Biodegradability**

| <b>Product/ingredient name</b> | <b>Test</b> | <b>Result</b> | <b>Dose</b> | <b>Inoculum</b> |
|--------------------------------|-------------|---------------|-------------|-----------------|
|--------------------------------|-------------|---------------|-------------|-----------------|



**LIC20 EPOXY ENAMEL BASE**

**12 . Ecological information**

heptan-2-one - 82.64 % - Readily -  
 - 20 days  
 - 73.14 % - Readily -  
 - 5 days

**Conclusion/Summary** : Not available.




| <u>Product/ingredient name</u> | <u>Aquatic half-life</u> | <u>Photolysis</u> | <u>Biodegradability</u> |
|--------------------------------|--------------------------|-------------------|-------------------------|
| heptan-2-one                   | -                        | -                 | Readily                 |
| toluene                        | -                        | -                 | Readily                 |

**Other adverse effects** : No known significant effects or critical hazards.

**13 . Disposal considerations**


**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**14 . Transport information**

| <u>Regulation</u> | <u>UN number</u> | <u>Proper shipping name</u>   | <u>Classes</u> | <u>PG*</u> | <u>Label</u>  | <u>Additional information</u>            |
|-------------------|------------------|---|----------------|------------|---|--|
| <b>ADG</b>        | 1263             | Paint (solvent naphtha (petroleum), light arom. A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C8 through C10 and boiling in the range of approximately 135 °C to 210 °C (275 °F to 410 °F).) | 3              | II         |    | -  |
| <b>ADR</b>        | 1263             | Paint (solvent naphtha (petroleum), light arom. A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C8 through C10 and boiling in the range of approximately 135 °C to 210 °C (275 °F to 410 °F).) | 3              | II         |  | -  |
| <b>IMDG</b>       | 1263             | Paint (solvent naphtha (petroleum), light arom. A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C8 through C10 and   | 3              | II         |  | <b>Emergency schedules (EmS)</b><br>3-05 |

## LIC20 EPOXY ENAMEL BASE

### 14 . Transport information

|      |      |   |   |    |   |   |
|------|------|---|---|----|---|---|
|      |      | boiling in the range of approximately 135 °C to 210 °C (275 °F to 410 °F).)   |   |    |   |   |
| IATA | 1263 | Paint (solvent naphtha (petroleum), light arom. A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C8 through C10 and boiling in the range of approximately 135 °C to 210 °C (275 °F to 410 °F).) | 3 | II |  | - |

PG\* : Packing group

### 15 . Regulatory information

#### Standard for the Uniform Scheduling of Drugs and Poisons

##### Ingredient name

No listed substance

##### Schedule

#### Control of Scheduled Carcinogenic Substances

##### Ingredient name

benzene

##### Schedule

Schedule: 2. when used as a feedstock containing more than 50% of benzene by volume

**Australia inventory (AICS)** : **Australia inventory (AICS):** Not determined.

**EU Classification** : F; R11  
Xn; R20/21  
Xi; R36/38  
R43  
R52/53

**HCS Classification** : Flammable liquid  
Carcinogen  
Target organ effects

### 16 . Other information

**Person who prepared the MSDS** : Validated by Kees Koelewijn on 4/18/2007.

**Date of previous issue** : No previous validation.

Indicates information that has changed from previously issued version.

#### Disclaimer

*To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.*

*Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*