|   | Form              |                  |
|---|-------------------|------------------|
| LATICRETE                                 |                   | Rev: <b>B</b>    |
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| ®   | Safety Data Sheet | Date: 27/02/2019 |
| Globally Proven<br>Construction Solutions |                   |                  |

### 1. **PRODUCT IDENTIFICATION**

TRADE NAME (as labeled): Flow EP Part A

CHEMICAL FAMILY: Epoxy Resin

MANUFACTURER'S/ DISTRIBUTOR'S NAME:

LATICRETE South East Asia Pte Ltd

38 Sungei Kadut,

Street 2 (Level2 A3),

Singapore 729245.

Phone number for additional information: (65) 6515 3028

Date prepared or revised: 09/12/2016

### 2. <u>COMPOSITION INGREDIENTS</u>

| Chemical Names             | CAS<br>NUMBERS | Percent |
|----------------------------|----------------|---------|
| 4,4' (1-methylethylidence) |                |         |
| bisphenol polymer with     | 25068-38-6     | 40-55   |
| (chloromethyl) oxirane     |                |         |
| Phenylcarbinol             | 100-51-6       | 7-10    |
| 2, 6-Dimethyl-2-heptanone  | 19549-80-5     | < 1     |
| Silicic Oxide              | 14808-60-7     | 15-20   |

### 3. HEALTH HAZARD INFORMATION

SYMPTOMS OF OVEREXPOSURE for each potential route of exposure. (Possible Longer Term Effects) : N/A

SIGNS AND SYMPTOMS OF EXPOSURE (Acute effects)

Inhaled : No adverse effects due to inhalation are expected.

Contact with skin or eyes : Irritating to skin and eye. May cause an allergic skin reaction.



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Absorbed through skin : N/A

Swallowed : May cause discomfort if swallowed.

# SUSPECTED CANCER AGENT?

 $\sqrt{10}$  NO: This product's ingredients are not found in the lists.

# 4. FIRST AID: EMERGENCY PROCEDURES

- Eye Contact : Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
- Skin Contact : Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.
- Inhaled : Move to fresh air. Call a physician if symptoms develop or persist.

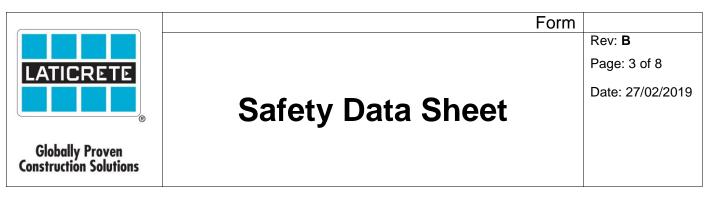
Swallowed : Rinse mouth. Get medical attention if symptoms occur.

### 5. <u>FIRE FIGHTING MEASURES</u>

| Flash Point method                | : N/A   |
|-----------------------------------|---|
| Auto ignition temperature (°C)    | : N/A   |
| Flammable limits in air, volume % | : N/A   |
| Fire extinguishing materials      | : Water fog. Foam. Dry chemical powder. Carbon dioxide.   |
| Special firefighting procedures   | : Do not use water jet as an extinguisher, as this will spread<br>the fire. In case of fire and/or explosion do not breathe<br>fumes. Move containers from fire area if you can do so<br>without risk. Self-contained breathing apparatus and full<br>protective clothing must be worn in case of fire. |

Unusual fire and explosion hazards : During fire, gases hazardous to health may be formed.

### 6. ACCIDENTAL RELEASE MEASURES



Spill response procedures (include employee protection measures)

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Large Spills: Stop the flow of material, if this is without risk. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use.

NOTE: Dispose of all wastes in accordance with federal, state and local regulations.

Environmental precautions: Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground. Environmental manager must be informed of all releases.

### 7. HANDLING AND STORAGE

Precautions for safe handling: Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Persons with epoxy allergy should not work with this product. Wear appropriate personal protective equipment. Provide adequate ventilation. Observe good industrial hygiene practices.

Conditions for safe storage: Keep container tightly closed. Store in a well-ventilated place. Store away from incompatible materials.

### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ventilation and engineering controls : Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other

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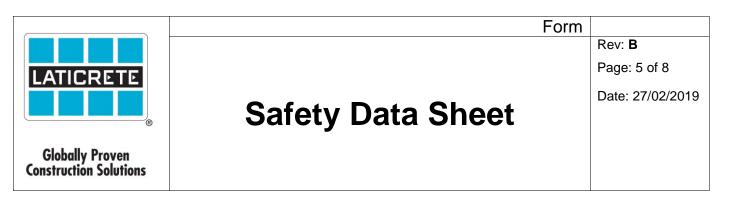
|                                    | engineering controls to maintain airborne levels<br>below recommended exposure limits. If exposure<br>limits have not been established, maintain airborne<br>levels to an acceptable level. Provide eyewash<br>station.             |
|------------------------------------|---|
| Respiratory protection (type)      | : In case of insufficient ventilation, wear suitable respiratory equipment.   |
| Eye protection (type)              | : Chemical goggles or safety glasses with side shields.   |
| Gloves (specify material)          | : Use impervious gloves, vinyl or rubber.   |
| Other clothing and equipment       | : Wear clean, long-sleeved, body-covering clothing.   |
| Work practices, hygienic practices | : Always observe good personal hygiene measures,<br>such as washing after handling the material and<br>before eating, drinking, and/or smoking. Routinely<br>wash work clothing and protective equipment to<br>remove contaminants. |

Other handling and storage requirements : N/A

Protective measures during maintenance of contaminated equipment: See above.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

| Relative density           | : 1.4                |
|----------------------------|----------------------|
| Melting point or range,°C  | : N/A                |
| Boiling point or range, °C | : > 200 °C           |
| РН                         | : N/A                |
| Viscosity                  | : 5000 cP (23 ±2 °C) |
| Flash point                | : 259 °C             |
| Solubility in water        | : Insoluble          |



| Bulk density                 | : 1.6               |
|------------------------------|---------------------|
| Vapor pressure, mmHg at 20°C | : 0.06mm Hg (21 °C) |

Appearance and odor : Grey/ White liquid (viscous), mild odor.

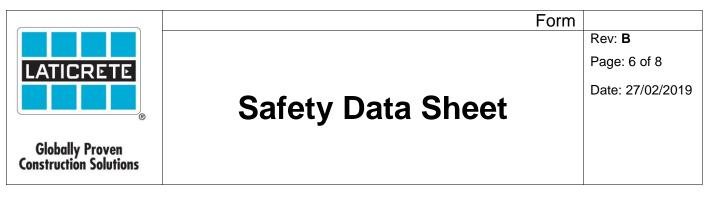
HOW TO DETECT THIS SUBSTANCE (warning properties of substance as a gas, vapor, dust, or mist)

#### 10. STABILITY AND REACTIVITY

| Stability                            | : The product is stable and non-reactive under normal conditions of use, storage and transport.  |
|--------------------------------------|--|
| Conditions to avoid                  | : Excessive heat. Contact with incompatible materials.   |
| Incompatibility (materials to avoid) | : Strong oxidizing agents.   |
| Hazardous decomposition products     | : At thermal decomposition temperatures, carbon monoxide and carbon dioxide. Aldehydes.  |
| Hazardous polymerization             | : Masses of more than 1 pound of product plus an aliphatic amine will cause irreversible polymerization with considerable heat build up. |

#### 11. TOXICOLOGY INFORMATION

| Symptoms related to the<br>physical, chemical and<br>toxicological characteristics<br>Information on toxicological effect | Rash. Irritant effects.   |
|---|---|
| Acute toxicity  | May cause discomfort if swallowed.  |
| Skin corrosion/irritation   | Causes skin irration.   |
| Serious eye damage/eye<br>irritation  | Causes serious eye irritation.  |
| Respiratory or skin sensitization   |   |
| Respiratory sensitization   | No data available.  |
| Skin sensitization  | May cause an allergic skin reaction.  |
| Germ cell mutagenicity  | Not expected to be mutagenic.   |
| Carcinogenicity   | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. |



OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

| NOT IISTED.   |   |
|---|---|
| Reproductive toxicity                               | This product is not expected to cause reproductive or<br>developmental effects. |
| Specific target organ toxicity -<br>single exposure | No data available.  |
| Specific target organ toxicity - repeated exposure  | No data available.  |
| Aspiration hazard                                   | No data available.  |
| Chronic effects                                     | Prolonged or repeated contact may cause drying, cracking, or irritation.        |

### 12. ECOLOGICAL INFORMATION

| Ecotoxicity  |      | Toxic to aquatic life with long lasting effects.  |                               |  |
|--|------|---|-------------------------------|--|
| Components   |      | Species   | Test Results                  |  |
| -[4,4'-(1-methylethylidine) bisphenol polymer with ( |      | enol polymer with (chlorometh   | yl) oxirane] (CAS 25068-38-6) |  |
| Aquatic  |      |   |                               |  |
| Acute  |      |   |                               |  |
| Algae  | IC50 | Algae   | 11 mg/l, 72 hours             |  |
| Crustacea  | EC50 | Daphnia   | 1.8 mg/l, 48 hours            |  |
| Fish   | LC50 | Fish  | 1.7 mg/l, 96 hours            |  |
| Persistence and degradability                        |      | No data is available on the degradability of this product.  |                               |  |
| Bioaccumulative potential                            |      | No data available for this product.   |                               |  |
| Mobility in soil                                     |      | Not available.  |                               |  |
| Other adverse effects                                |      | No other adverse environmental effects (e.g. ozone depletion,<br>photochemical ozone creation potential, endocrine disruption,<br>global warming potential) are expected from this component. |                               |  |

### 13. DISPOSAL CONSIDERATIONS

Disposal instructions : Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container



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in accordance with local/regional/national/international regulations.

Hazardous waste code : The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

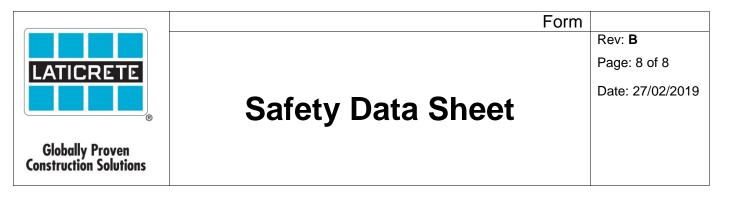
### 14. TRANSPORT INFORMATION

Transport over land ADR/RID NOT REGULATED FOR TRANSPORT Transport over sea IMDG NOT REGULATED FOR TRANSPORT Transport by air ICAO/IATA NOT REGULATED FOR TRANSPORT

### 15. <u>REGULATORY INFORMATION</u>

- Hazard labels : Xi Irritant
- R-phrases : R36/38 Irritating to eyes and skin.
  - R43 May cause sensitization by skin contact
- S-phases : S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 After contact with skin, wash immediately with plenty of water and soap.S37/39 wear suitable gloves and eye/face protection.



# 16. OTHER INFORMATION

This information is furnished without warranty, representation, inducement or license of any kind; except that it is accurate to the best of our knowledge, or obtained from sources believed by us to be accurate.