

19950-B: Forumlok (Hardener)

Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Identification of the substance or mixture

Product Name: Forumlok (Hardener)
Product Code: 19950-B
Product Use: Thread locking compound, adhesive
Supplier: Forum Energy Technologies
10344 Sam Houston Park Drive, Suite 300
Houston, TX 77064
Tel: 713-351-7900
www.f-e-t.com

Emergency telephone number: +1 813 248 0585, 24 hours

E-mail address for questions regarding this SDS: sharons@socousa.com

2. HAZARDS IDENTIFICATION

GHS Classification

Skin irritation (Category 2)
Serious eye damage/eye irritation (Category 1)
Skin sensitization (Category 1B)
Respiratory sensitization (Category 1B)

GHS label elements



Signal Word:

Danger

Hazard statements:

H315 – Causes skin irritation
H317 – May cause an allergic skin reaction
H318 – Causes serious eye damage
H334 – May cause allergy or asthma symptoms or respiratory difficulties if inhaled

Precautionary statements:

P280 – Wear protective gloves/protective clothing/eye protection/face protection
P302 + P352 – IF ON SKIN: Wash with plenty of soap and water

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P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P304 + P340 – IF INHALED: remove person to fresh air and keep comfortable for breathing.

Other hazards: None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Amine based epoxy hardener

Hazardous components

| Component | Concentration |
|---|---------------|
| Polyethylene polyamines CAS-No. 68131-73-7 | 10-15% |

4. FIRST AID MEASURES

- General:** If exposed or concerned, get medical attention or advice.
- Inhalation:** Move exposed person to fresh air. If effects occur, get medical attention.
- Ingestion:** Wash out mouth with water. Do not induce vomiting. Get medical attention.
- Skin contact:** Remove contaminated clothing and shoes. Wash skin with soap and water. Get medical attention if irritation symptoms persist.
- Eye contact:** Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention.

Note to physician: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

- Suitable media:** Use dry chemical, CO₂, water spray (fog) or foam.
- Not suitable:** Do not use water jet.
- Combustion products:** Carbon monoxide, carbon dioxide.
- Special protective equipment for fire-fighters:** Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions:** Wear appropriate personal protection equipment (see section 8).
- Environmental precautions:** Recover free product. Use suitable adsorbent and dispose of material in accordance with all regulations. Keep product out of sewers and watercourses, prevent soil penetration. Advise authorities if large amounts of product enter waterways or extensive land areas.

7. HANDLING AND STORAGE

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Handling: Wear appropriate personal protection equipment (see section 8). Do not eat, drink or smoke when using. Wash thoroughly after handling. Follow good hygiene and housekeeping practices.

Storage: Store in cool dry area in original or equivalent container in accordance with all regulations. Do not expose to extreme heat or flame. Do not expose to extreme cold. Store at 5 – 40°C, away from strong oxidizers and acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

| Chemical name | CAS no. | OSHA PEL | ACGIH TLV |
|-------------------------|------------|-----------------|-----------------|
| Polyethylene polyamines | 68131-73-7 | not established | not established |

Engineering controls: Use with adequate ventilation.

Eye/face protection: Safety glasses. Safety goggles where risk of splash exists. Ensure eye bath is to hand.

Hand protection: Protective gloves. Nitrile recommended.

Skin protection: No additional protection required beyond normal industrial attire is required.

Respiratory protection: Use a NIOSH approved respirator where air levels exceeding TWA may exist. Organic vapor cartridges.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and odor: Red liquid, amine odor

pH: No data

Flash point: > 93°C (PMCC)

Evaporation rate: No data

Upper flammability limit: No data

Lower flammability limit: No data

Vapor pressure: No data

Vapor density: > 1

Relative density: 1.02

Solubility: Insoluble in water, soluble in alcohols and petroleum distillates

Viscosity: 300-500 cps

10. STABILITY AND REACTIVITY

Chemical stability: Stable

Polymerization: Will not occur

Conditions to avoid: Extreme heat

Incompatible materials: Strong oxidizers

Hazardous decomposition products: Carbon oxides, other unknown products

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11. TOXICOLOGICAL INFORMATION

Potential acute health effects

| | |
|-----------------------------------|--|
| Acute toxicity: | <i>Estimate based on similar substances:</i> LD50 oral – rat – 1000-2000 mg/kg |
| Eye damage/irritation: | Causes serious eye damage. Direct contact with eyes can cause irreversible damage including blindness. |
| Skin corrosion/irritation: | Contact may cause skin irritation with local redness. |

Potential chronic health effects

| | |
|--------------------------------|--|
| Sensitization: | May cause allergic skin and respiratory reactions. |
| Repeated dose toxicity: | Except for skin and respiratory sensitization, none anticipated. |
| Carcinogenicity: | No ingredients listed as carcinogens. |
| Mutagenicity: | No ingredients listed as mutagens. |
| Reproductive toxicity: | No ingredients listed as reproductive toxins. |
| STOT repeated exposure: | No known effects. |

12. ECOLOGICAL INFORMATION

| | |
|-----------------------------------|---|
| Ecotoxicity: | No known significant effects or critical hazards. |
| Persistence/degradability: | No information available. |
| Bioaccumulative potential: | No information available. |
| Mobility in soil: | No information available. |
| Other adverse effects: | No information available. |

13. DISPOSAL CONSIDERATIONS

| | |
|------------------------|---|
| Waste disposal: | Generation of waste should be avoided or minimized where possible. Empty containers may contain residue. Dispose of as hazardous waste via licensed waste disposal operator. Follow all applicable regulations. |
|------------------------|---|

14. TRANSPORT INFORMATION

| | |
|--|----------------|
| Transport information according to ADR, RID, ADN, IMDG, ICAO, IATA: | Not regulated |
| Transport information according to USDOT: | Not regulated. |

15. REGULATORY INFORMATION

US Regulations

- SARA 302 Extremely Hazardous Substances:** None.
- SARA 313 Components:** None.

State Regulations

- California Prop 65:** No ingredients listed.
- Massachusetts Right to Know:** No ingredients listed.
- New Jersey Right to Know:** No ingredients listed.

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Pennsylvania RTK Hazardous Substances: No ingredients listed.

United States inventory (TSCA): All ingredients listed or exempt.

International regulations

Canada: WHMIS Classification: D1A: Material causing immediate and serious toxic effects (very toxic). D2A: Material causing other toxic effects (Very toxic). D2B: Material causing other toxic effects (toxic). **WHMIS:** This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

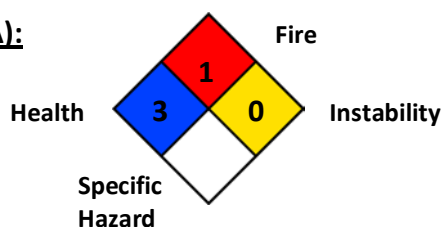
Canada DSL: All ingredients listed.

16. OTHER INFORMATION

Hazardous Material Information System (USA):

| | |
|---------------------|----|
| HEALTH | 3* |
| FIRE | 1 |
| REACTIVITY | 0 |
| PERSONAL PROTECTION | B |

National Fire Protection Association (USA):



Revision information: Original GHS issue 12 May 2015. Rev 1: corrected GHS classification terminology in Section 2; corrected hazardous components in Section 3 and associated information in Sections 8, 11 and 15. Rev 2: product name change in Section 1 and title.

END OF SAFETY DATA SHEET