

89986, 89970: Forum Copper Guard 4 Safety Data Sheet

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

Identification of the substance or mixture

Product Name: Forum Copper Guard 4
Product Code: 89986, 89970
Product Use: Thread compound, lubricant
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

Acute aquatic toxicity (Category 2)
Chronic aquatic toxicity (Category 2)

GHS label elements

Symbol:



Signal Word:

None

Hazard statements:

H411 – Toxic to aquatic life with long lasting effects

Precautionary statements:

P273 – Avoid release to the environment

P391 – Collect spillage

P501 – Dispose of contents/container to an approved waste disposal plant

Other hazards: High pressure injection under skin is a medical emergency.

3. COMPOSITION/INFORMATION ON INGREDIENTS

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Chemical name	EC no.	CAS no.	Weight %
Copper	231-159-6	7440-50-8	4-5

4. FIRST AID MEASURES

- General:** If exposed or concerned, get medical attention or advice.
- Inhalation:** Move exposed person to fresh air. Get medical attention if symptoms occur. No symptoms expected.
- Ingestion:** Wash out mouth with water. Do not induce vomiting unless instructed to by medical personnel. Get medical attention if nausea or stomach pains occur.
- Skin contact:** Remove contaminated clothing and shoes. Wash skin with soap and water. Get medical attention if irritation symptoms occur. High pressure injection under skin is a medical emergency.
- Eye contact:** Check for and remove any contact lenses. Immediately flush eyes with running water for at least 5 minutes, keeping eyelids open. Get medical attention if redness or irritation persists.

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, products of incomplete hydrocarbon combustion, copper oxides.
- 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 oil 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 enters waterways or extensive land areas.

7. HANDLING AND STORAGE

- 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. Store below 65°C, away from strong oxidizers and acids.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Chemical name	CAS no.	Control parameter	Basis
Copper	7440-50-8	TWA: 1 mg/m ³	ACGIH TLV

Engineering controls: Use with adequate ventilation.
Eye/face protection: Safety glasses. Ensure eye bath is to hand.
Hand protection: Protective gloves if prolonged or repeated contact is unavoidable.
Skin protection: No additional protection required beyond normal industrial attire is required.
Respiratory protection: No special measures required.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and odor: Dark copper semi-solid, mild odor
pH: Not applicable, insoluble in water
Flash point: >200°C (Cleveland open cup)
Evaporation rate: No data
Upper flammability limit: Not applicable
Lower flammability limit: Not applicable
Vapor pressure: No data
Vapor density: No data
Relative density: 1.25
Solubility: Insoluble in water, soluble in alcohols and petroleum distillates
Viscosity: Cone penetration 310-340 (ASTM D-217)

10. STABILITY AND REACTIVITY

Chemical stability: Stable
Conditions to avoid: Extreme heat
Incompatible materials: Strong oxidizers
Hazardous decomposition products: Harmful or flammable vapors, copper oxides

11. TOXICOLOGICAL INFORMATION

Potential acute health effects

Acute toxicity:
Ingestion: Harmful if swallowed
Skin contact: No know effect
Inhalation: Harmful if inhaled, but not considered significant route of entry
Irritation: May cause mild redness and discomfort on contact with eyes
Corrosivity: Not corrosive

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Potential chronic health effects

Sensitization: Not a sensitizer
Repeated dose toxicity: Repeated exposure may cause drying of skin from loss of skin oils
Carcinogenicity: No ingredients listed as carcinogens
Mutagenicity: Not mutagenic
Reproductive toxicity: Not a reproductive toxin.
STOT repeated exposure: No effects known.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Toxic to aquatic life with long lasting effects

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
Copper		Pimephales promelas, 96h, LC50: 0.0094 mg/L Pimephales promelas, 96h, LC50: 0.0103 mg/L Pimephales promelas, 96h, LC50: 0.0278 mg/L	Daphnia magna, 48H EC50: 0.0318 mg/L Daphnia magna, 48H EC50: 0.036 mg/L Daphnia magna, 48H EC50: 0.055 mg/L

Persistence/degradability: No information available
Mobility: 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 UD DOT: Not regulated

Transport information according to ADR, RID, ADN, IMDG, ICAO, IATA

UN number: UN3077
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (copper)
Hazard class: Class 9
Packing group: PGIII
Additional information: Marine pollutant

15. REGULATORY INFORMATION

OSHA Hazards: None
SARA 311/312 Hazard classes: None
SARA 313: Ingredients subject to reporting requirements: copper, CAS-no. 7440-50-8
Massachusetts Right To Know Components: copper, CAS-no. 7440-50-8
Pennsylvania Right To Know Components: copper, CAS-no. 7440-50-8

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New Jersey Right To Know Components: copper, CAS-no. 7440-50-8

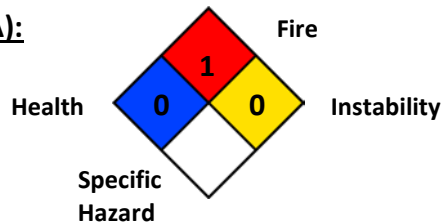
California Prop 65 Components: This product does not contain any chemicals known to the State of California to cause cancer, birth defects or any other reproductive harm.

16. OTHER INFORMATION

Hazardous Material Information System (USA):

HEALTH	0
FIRE	1
REACTIVITY	0
PERSONAL PROTECTION	B

National Fire Protection Association (USA):



Revision information: Original GHS compliant issue.

END OF SAFETY DATA SHEET