



Material Safety Data Sheet

Product Name: FROG® Leap ALL-OUT
Revision Date: October 24, 2011
Supersedes: New MSDS
Revision: 1

1. Identification of the substance and company

Chemical Name: Elemental Copper (from copper-triethanolamine complex)
Chemical Formula: Triethanolamine Complex
Chemical Family: Elemental Copper
Type of product: Swimming pool algaecide
Supplier: King Technology, Inc
530 11th Ave S, Hopkins, MN 55343, USA
Phone (952) 933-6118
EPA Registration Number: 53735-9
Emergency Telephone: Chemtrec (800) 424-9300

2. Composition / information on ingredients

Components CAS	Weight %	ACGIH-TLV Data	OSHA (PEL) Data
Copper triethanolamine complex 82027-59-6	3.03	NE	NE

3. Hazards identification

Emergency overview: Dark blue liquid with no odor. Harmful if swallowed; may cause skin and eye irritation.

Potential Health Effects:

- **Eye Contact:** May cause moderate irritation to eyes
- **Skin Contact:** May cause skin irritation.
- **Inhalation:** May irritate the respiratory tract
- **Ingestion:** Harmful if swallowed

NFPA Ratings (scale 0-4): Health: 1, Fire: 1, Reactivity: 0

4. First-aid measures

Eye contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes then continue rinsing eye. Call a poison control center or doctor for treatment advice if irritation persists.

Skin contact: Remove contaminated clothing. Rinse skin immediately with plenty of soap and water for 15-20 minutes. Call a poison control center or doctor for treatment advice.



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Inhalation: Move person to fresh air. If person is not breathing call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for treatment advice.

Ingestion: Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. Have the product container or label with you when calling a poison control center or doctor, or when going for treatment.

5. Fire fighting measures

Flash point: N/A

Suitable extinguishing media: Use media suitable for surrounding fires

Fire fighting procedure: Fire fighters should wear self-contained breathing apparatus and full protective clothing.

6. Accidental release measures

Personal precautions: Using appropriate protective clothing and safety equipment contain spilled material with an absorbent material, such as sweeping compound. Sweep up and dispose as waste in a suitable container.

Methods for cleaning up: Dispose of according to local, state, and federal regulations.

7. Handling and storage

Handling: Do not mix with other chemicals. Do not get in eyes, on skin, or on clothing. Wear eye protection and protective clothing. Wash thoroughly after handling.

Storage: Keep this product in original closed container when not in use. Store in clean, dry area below 95°F. Do not contaminate water, food, or feed by storage, disposal, or cleanup equipment. Average shelf life under proper conditions is 2 years.

8. Exposure controls / personal protection

Ventilation requirements: Use in well ventilated areas.

Personal protective equipment:

- **Respiratory protection:** None required for normal use.
- **Hand protection:** Wear rubber gloves when handling this product. Avoid contact with skin.
- **Eye protection:** Wear goggles or safety glasses with side shields when handling this product.
- **Skin and body protection:** Wear rubber gloves when handling this product. Avoid contact with skin.

Hygiene measures: Remove and wash contaminated clothing before reuse. Facilities storing or



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utilizing this material should be equipped with an eyewash and safety shower.

9. Physical and chemical properties

Appearance: Dark blue liquid
Odor: Odorless
Melting point / range: Not applicable
Boiling point / range: Not applicable
Vapor pressure: Not applicable
Vapor density: Not applicable
Solubility in water: Soluble
Specific gravity: 1.06 g/mL (8.84 lb/gal)
pH: 9.1

10. Stability and reactivity

Stability: This product is stable under normal conditions.

Conditions to avoid: Do not use where pH of water is below 6. Copper chelate may dissociate and release copper ions, which could be precipitated as insoluble copper salts. Should not be applied when water temperature is below 60°F. Protect from freezing.

Hazardous decomposition products: None known

Hazardous polymerization: Hazardous polymerization will not occur.

11. Toxicological information

Acute toxicity:
– Rat oral LD50: 1312 mg/kg Slightly toxic if swallowed.
– Rabbit dermal LD50: >2.0 g/kg Considered to be a negligible irritant to skin.
– Eye irritation (rabbit): Considered to be a moderate irritant

Carcinogenicity:
This product is not listed as a carcinogen by IARC.
This product is not listed as a carcinogen by NTP.
This product is not listed as a carcinogen by OSHA.

12. Ecological information

No information available

13. Disposal considerations

Waste disposal: If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. Do not contaminate water, food, or feed by storage, disposal, or cleaning of equipment. Do not put product, spilled product, or filled or partially filled containers into the trash or waste compactor.

Empty container: Do no reuse container. Rinse thoroughly before discarding in trash.



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14. Transportation information

Not regulated

15. Regulatory information

USA:

- **SARA (311, 312) hazard class:** This product or its components are not listed.
- **CERCLA** This product or its components are not listed.
- **TSCA** This product or its components are listed or are not required to be listed.
- **OSHA** Product is hazardous by definition of the Hazardous Communication Standard
- **Clean Water Act** This product or its components are not listed.

16. Other information

This information is given without a warranty or guarantee. No suggestions for use are intended or shall be construed as a recommendation to infringe any existing patents or violate any Federal, State, or local laws. Safe handling and use is the responsibility of the customer. Read the label before using this product. This information is true and accurate to the best of our knowledge.

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End of safety data sheet