



MATERIAL SAFETY DATA SHEET

Komeen®

Date Prepared: September 3, 1997

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFICATION

Product Name: Komeen®

HAZARDS CLASSIFICATION (0-minimal, 1-slight, 2-moderate, 3-serious, 4-severe)

NFPA: HEALTH-2 FIRE-1 REACTIVITY-0

HMIS: HEALTH-2 FIRE-1 REACTIVITY-0

MANUFACTURER

Company Name: Griffin Corporation
Address: PO Box 1847, Rocky Ford Road
Valdosta, GA 31603-1847

EMERGENCY PHONE NUMBERS

Griffin Corporation: (800) 237 1854

Chemtec: (800) 424 9300

2. COMPOSITION/ INFORMATION ON INGREDIENTS

Component Name	% by Wt.	CAS#	ACGIH TLV	OSHA PEL
Elemental Copper *	8%	Not available	Not determined	Not determined
Inert ingredients	92%			

*derived from copper-ethylenediamine complex and copper sulfate pentahydrate.

Components not precisely identified are proprietary or not hazardous.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Dark Purple liquid that may cause moderate irritation to the eyes and skin. See below for route-specific details.

POTENTIAL HEALTH EFFECTS

Inhalation: Toxic if inhaled.
Eye Irritation: Considered to be a moderate irritant. Avoid eye contact with the product by using chemical safety glasses or goggles. May cause redness, swelling, and discharge, but is reversible.
Skin Irritation: Slight skin irritant.
Skin Absorption: Slightly toxic dermally.
Ingestion: Moderately toxic by ingestion.



4. FIRST AID MEASURES

Inhalation: Remove victim to fresh air. If not breathing, give artificial respiration preferably mouth-to-mouth. Get professional medical attention.

Eye Contact: Hold eyelids open and flush with water for 15-20 minutes until no evidence of chemical remains. Get professional medical attention if irritation persists.

Skin Contact: Remove contaminated clothing and shoes. Wash with plenty of soap and water for 15-20 minutes until no evidence of chemical remains. Get professional medical attention if irritation persists.

Ingestion: If ingested, contact physician or call Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flash Point & Method: Not determined

Flammable Limits: Not determined

Autoignition Temperature: Not determined

FIRE FIGHTING HAZARDS & PROCEDURES

General Hazard: Prevent human exposure to fire, smoke, fumes or products of combustion.

Extinguishing Media: Not determined

Fire Fighting Equipment: Wear protective clothing and self-contained breathing apparatus.

Hazardous Combustion Products: Decomposes above 200°C.

6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Cover the spill with an absorbent material such as sweeping compound or lime. Sweep up and place in suitable (fiberboard) containers for later disposal.

7. HANDLING AND STORAGE

Storage Temperature: Store below 35°C (95°F). Decomposes above 200°C. Average shelf life under proper storage conditions is 2 years.

General Information: Store in a clean, dry area. Do not store near feed, food or within the reach of children.



8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Ventilation:	Provide local exhaust ventilation and/or general dilution ventilation to meet published exposure limits.
Respiratory Protection:	Wear dual cartridge respirator for dusts and mists.
Eye Protection:	Wear protective eyewear to prevent contact with this substance.
Protective Clothing:	Wear rubber gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure:	No appreciable vapor pressure. Open containers can lose small amounts of water by volatilization.
Density:	1.22
Solubility in Water:	Soluble in water and alcohols.
pH:	9.62
Boiling Point:	215°F. Loses water and decomposes at high temperatures.
Melting Point:	Not determined
Odor:	Odorless
Color:	Dark purple
Physical State:	Liquid

10. STABILITY AND REACTIVITY

General:	This material is stable under normal conditions.
Conditions to Avoid:	Should not be used where pH of water is below 6 due to the possibility that the copper chelate may dissociate and release copper ions which could subsequently be precipitated as insoluble copper salts. Should not be applied when water temperature is below 60°F.
Hazardous Decomposition:	Decomposes above 200°C.
Hazardous Polymerization:	Material is not known to polymerize.

11. TOXICOLOGICAL INFORMATION

ACUTE

Inhalation:	Acute inhalation LC ₅₀ = 0.81 mg/L (rat - 4 hour).
Eye Irritation:	Considered to be a moderate irritant. Avoid eye contact.
Skin Irritation:	Considered to be a slight irritant to the skin. Material is a non-sensitizer to the skin.
Skin Absorption:	Acute dermal LD ₅₀ > 2,000 mg/kg.
Ingestion:	Oral LD ₅₀ = 498 mg/kg.



12. ECOLOGICAL INFORMATION

For detailed ecological information, write to the address listed in Section 1 of this MSDS or call 912/242-8635 and ask for Regulatory Affairs.

13. DISPOSAL CONSIDERATIONS

Comply with appropriate disposal regulations. Landfill solids at permitted sites. Use registered transporters.

14. TRANSPORT INFORMATION

Department of Transportation (DOT) / International Air Transport Association (IATA) / International Maritime Organization (IMO):

Classification:	Copper Based Pesticide, Liquid, Toxic (Copper-Ethylenediamine Complex 8%)
Class:	6.1
Identification Number:	UN 3010
Packing Group:	III

15. REGULATORY INFORMATION

OSHA:	This product is considered hazardous under the OSHA Hazardous Communication Standard 29 CFR 1910.1200.
TSCA:	All product components are on the TSCA Chemical Inventory.
CERCLA:	Releases of this material to air, land, or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to the state and local emergency planning committees under the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304.
RCRA:	When a decision is made to discard this material as supplied, it does not meet RCRA's characteristic definition of ignitability, corrosivity, or reactivity, and is not listed in 40 CFR 261.33.
SARA TITLE III	
311/312 Hazard Categories:	This product has been reviewed according to the EPA "Hazard Categories" and is categorized as an acute health hazard (40 CFR 370.41).
313 Reportable Ingredients:	This product does not contain any material listed in Section 313 above de minimis concentrations.



16. OTHER INFORMATION

REVISION SUMMARY

This Material Safety Data Sheet replaces the one dated 06/20/96. Revisions have been made in the following sections: 2.

Komeen® is a registered trademark of Griffin Corporation.

The information in this MSDS relates to this specific material. It may not be valid for this material if used in combination with any other materials or in any process. It is the users' responsibility to satisfy themselves as to the suitability and completeness of this information for their own particular use.