

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200 Standard must be consulted for specific requirements.

U.S. DEPARTMENT of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (As Used on Label and List)

Code 715, 715S
Rainbow Flame Crystals & Sticks

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name

RUTLAND PRODUCTS

Address (Number, Street, City, State, and Zip Code)

7 CRAB TREE ROAD
JACKSONVILLE, IL 62650

Emergency Telephone Number

CHEMTREC 800-424-9300

Telephone Number Information

217-245-7963

Date Prepared

July 1990

Date Revised

Sept. 04

Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Chemical Identity	CAS #	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Copper sulfate, tri-basic	07758-98-7	1mg/m ³	1mg/m ³		
Ammonium Chloride	12125-02-9	10mg/m ³	10mg/m ³		
Silica, crystalline	14808-60-7	0.1mg/m ³	0.1mg/m ³	(respirable)	

(Silica is present in low concentrations as an impurity only. See section VI for discussion of health hazards.)

HMIS Rating - Health: 2 Flammability: 0 Reactivity: 0

Section III - Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H ₂ O = 1)	N/A
Vapor Pressure (mm Hg)	N/A	Melting Point	N/A
Vapor Density (Air = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A

Solubility in Water

Parts of mixture are soluble in water.

Appearance and Odor

Granular solids, no odor.

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used)	N/A	Flammable Limits	LEL	UEL
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Extinguishing Media

Carbon dioxide, dry chemical, foam.

Special Fire Fighting Procedures

Use self-contained breathing apparatus in confined spaces.

Unusual Fire and Explosion Hazards

None

The information presented herein is based either on data or opinion. Such data is, to the best of our knowledge, true and accurate. Such opinion is believed to be expert, and therefore generally reliable, but in some instances there are conflicts in expert opinion and in these instances we have relied on the opinion which, in our best judgment, appeared the most reasonable. All information herein is presented without guarantee or warranty and Rutland Products disclaims any liability incurred from the use thereof.

Section V - Reactivity Data

Stability	Unstable	X	Conditions to Avoid
	Stable		None

Incompatibility (Materials to Avoid)

ammonium nitrate, acids, alkalis, oxidizing and reducing agents.

Hazardous Decomposition or Byproducts

Bromine trifluoride, silver salts, iodine heptafluoride, potassium chlor:

Thermal or acid decomposition may release toxic and hazardous

fumes of chlorine, hydrogen chloride, ammonia and oxides of nitrogen.

Hazardous Polymerization	May Occur		Conditions to Avoid None
	Will Not Occur	X	

Section VI - Health Hazard Data

Route(s) of Entry	Inhalation?	Skin?	Ingestion?
	Yes	Yes	Yes

Health Hazards (Acute and Chronic)

Ingestion: irritation of mouth, esophagus and gastric system.
 Inhalation: may irritate nose, throat and lungs.
 Eyes: direct contact may irritate or burn eyes.
 Skin: may cause irritation, especially under prolonged contact. May result in dermatitis.

Carcinogenicity	NTP? No	IARC Monographs? OSHA Regulated? No
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Respirable crystalline silica from occupational sources is listed by IARC as a human carcinogen.

Signs and Symptoms of Exposure

See health hazards.

Medical Conditions Generally Aggravated by Exposure

Respiratory or skin disorders.

Emergency and First Aid Procedures

Ingestion: drink large amount of water. Call a physician.
 Inhalation: move to fresh air. If breathing ceases, begin artificial respiration. Contact a physician.
 Eyes: flush with water for 15 minutes. Contact an eye doctor.
 Skin: flush with water. If irritation persists, contact a physician.

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Sweep up. Avoid breathing dust.

Waste Disposal Method

Dispose of in accordance with local, state, and federal regulations.

Precautions to Be Taken in Handling and Storing

Protect from moisture. Store tightly closed in cool dry place.

Other Precautions

Keep out of sewer or stream, may be harmful to water organisms.

Section VIII - Control Measures

Respiratory Protection (Specify Type)

NIOSH/MSHA approved respirator for dust.

Ventilation	Local Exhaust	Special
	Sufficient to keep dust below TLV	As needed.
	Mechanical (General)	Other
	Sufficient to keep dust below TLV	As needed.

Protective Gloves

Rubber gloves.

Other Protective Clothing or Equipment

Work clothes designed to minimize skin exposure.

Work/Hygienic Practices

Wash with soap and water before eating, drinking or using toilet facilities.

Rainbow Flame Crystals

NAME OF PRODUCT: Rainbow Flame Sticks

This product contains the following chemicals subject to the reporting requirements of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). These chemicals are also subject to reporting under Section 304 of Title III, SARA.

CAS Number	Chemical	% WT	Reportable Quantity
12125-02-9	Ammonium Chloride	15	5,000 lbs.
01344-73-6	Copper Sulfate, tri-basic	15	*****

*****No reportable quantity is assigned to the broad class of copper compounds

even though they are considered CERCLA hazardous substances. In the event of a spill, you may consider a Reportable Quantity to be one (1) pound.