

Material Safety Data Sheet

Revision Date 27-Sep-2012

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product code CW1948
Product name CRYOSPRAY 835
Recommended Use Repair Material

Supplier Cronatron, A Lawson Brand
 Lawson Products, Inc.
 8770 W.Bryn Mawr Ave.- Suite 900
 Chicago, IL 60631
 1-866-529-7664

Emergency telephone number (888) 426-4851

2. HAZARDS IDENTIFICATION

Emergency Overview

Product dust may be irritating to eyes, skin and respiratory system.

Aggravated Medical Conditions

Pre-existing respiratory conditions may be aggravated by exposure to this product. Pre-existing kidney and/or liver disorders may be aggravated by exposure to this product. Pre-existing skin conditions may be aggravated by exposure to this product.

Principal Routes of Exposure

Eyes. Skin. Inhalation.

Potential health effects

Eyes Contact with eyes may cause irritation.

Skin Prolonged skin contact may cause skin irritation and/or dermatitis.

Inhalation May cause the following effects. Respiratory irritation. Lung damage. Metallic taste. laryngitis . May cause irritation to the mucous membranes. Iron deposits in the lungs may cause siderosis. pulmonary fibrosis (scarring of the lungs) . Chronic overexposure to copper dust may cause tiredness, stuffiness, diarrhea, vomiting, discoloration of the skin and eyes, kidney and liver disorder. Inhalation of copper oxide fumes can cause metal fume fever. Initial symptoms of metal fume fever can include sweating, shivering, headache, fever, chills, thirstiness, muscle aches, nausea, vomiting, weakness, and tiredness . Prolonged overexposure to Aluminum oxide may cause pulmonary fibrosis and emphysema. May be implicated in Alzheimer's Disease .

Ingestion No adverse affects expected

This item was discontinued prior to GHS implementation.
A GHS Safety Data Sheet is not available for this item.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Copper	7440-50-8	60-100
Aluminum	7429-90-5	7-13
Iron	7439-89-6	0.5-1.5

4. FIRST AID MEASURES

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin contact Remove and wash contaminated clothing before re-use. Wash area thoroughly with soap and water.

Ingestion Consult a physician.

Inhalation Remove to fresh air.

5. FIRE FIGHTING MEASURES

Flash point °C Not Applicable
Flash point °F Not Applicable
Method Not Applicable

Autoignition temperature °C Not Applicable
Autoignition temperature °F Not Applicable

Flammability Limits (% in Air)

Upper No data available
Lower No data available

Suitable extinguishing media

Use extinguishing media appropriate to surrounding fire .

Special protective equipment for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

Fire and Explosion Hazards

Most metal powders can form explosive mixtures with air. There is a moderate fire or explosion hazard when metal powder dusts are exposed to heat or flame.

Sensitivity to shock

No information available.

Sensitivity to static discharge

No information available.

6. ACCIDENTAL RELEASE MEASURES

Methods for cleaning up

Keep airborne dusts at a minimum when cleaning up. Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE**Handling**

Keep from excessive heat. Do not mix with acids or organics. Keep container closed when not in use.

Storage

Keep in a dry place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	OSHA PEL (TWA)	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Iron	-	-	5.0 mg/m ³ as iron oxide respirable fraction	-
Aluminum	15 mg/m ³	-	1 mg/m ³	-
Copper	0.1 mg/m ³	-	0.2 mg/m ³ 1 mg/m ³	-

Ventilation and Environmental Controls

Provide local exhaust ventilation. Face velocity of 60 fpm (minimum) if used in confined spaces.

Hygiene measures

Washing hands, face, neck and arms thoroughly before eating or smoking is recommended.

Respiratory protection

Use air supplied respirator in confined spaces. Wear a respirator or gas mask with appropriate NIOSH approved cartridge or canister, or supplied air equipment, if airborne concentration limits are exceeded.

Hand Protection

Impervious gloves.

Eye protection

Goggles.

Skin and body protection

Apron.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Powder
Color	Gold / Yellow
Odor	None
Odor Threshold	Not Applicable
pH	Not Applicable
Specific Gravity	Not Applicable
Vapor pressure	Not Applicable
Vapor density	Not Applicable
Evaporation Rate	Not Applicable
Water solubility	Insoluble
VOC Content	Not Applicable
Partition Coefficient (n-octanol/water)	No data available
Boiling point/range °C	Not Applicable

Boiling point/range °F
Melting point/range °C
Melting point/range °F
Flash point °C
Flash point °F

Not Applicable
1348-1426
2460-2600
Not Applicable
Not Applicable

10. STABILITY AND REACTIVITY**Stability**

Stable

Conditions to avoid

Avoid breathing spray mist.

Incompatibility

Acids.

Hazardous Decomposition Products

Contact of metal alloy powders with strong acids may form flammable and explosive hydrogen gas. Contaminants in the atmosphere such as chlorinated hydrocarbon vapors from cleaning and degreasing operations. Reasonably expected decomposition products from normal use of these products include the oxides of the material listed in the ingredients section, as well as carbon monoxide, carbon dioxide, ozone and nitrogen oxides.

Polymerization

Will occur.

11. TOXICOLOGICAL INFORMATION**Component Information**

Chemical Name	LD50 (oral, rat)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat)
Iron 7439-89-6	984 mg/kg	-	-
Aluminum 7429-90-5	-	-	-
Copper 7440-50-8	-	-	-

Synergistic Products

None known

Specific Hazards

Copper dust and fume affect the respiratory system, lungs, skin, liver and eyes.

Potential health effects

Sensitization	None known .
Chronic toxicity	See Section 2 .
Mutagenic effects	None known .
Teratogenic effects	None known .
Reproductive toxicity	None known .

Product code **CW1948**Product name **CRYOSPRAY
835****Target Organ Effects** None Known.**Carcinogenic effects** See table below

Chemical Name	ACGIH OEL - Carcinogens	IARC	NTP - Known Carcinogens	NTP - Suspected Human Carcinogens	OSHA RTK Carcinogens
Iron	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Aluminum	A4	Not Listed	Not Listed	Not Listed	Not Listed
Copper	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

12. ECOLOGICAL INFORMATIONCopper**Water Flea Data***Daphnia magna* EC50=0.03 mg/L (48 h)**13. DISPOSAL CONSIDERATIONS****Disposal Information**

Dispose of all product, residues and clean-up materials in accordance with local, state, and federal regulations.

14. TRANSPORTATION INFORMATION**DOT**

Not Regulated.

TDG

Not Regulated

15. REGULATORY INFORMATION

Chemical Name	US EPA SARA 313 Emission Reporting
Aluminum	Listed
Copper	Listed

State Regulations

Chemical Name	New Jersey - RTK	Pennsylvania - RTK	California Prop. 65
Iron	Not Listed	Not Listed	Not Listed
Aluminum	Listed	Listed	Not Listed
Copper	Not Listed	Listed	Not Listed

International Inventories

Chemical Name	EINECS	DSL	NDSL	TSCA
Iron	X	X	-	X
Aluminum	X	X	-	X

Copper	X	X	-	X
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CPR

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all of the information required by the Controlled Product Regulations

16. OTHER INFORMATION**Prepared By**

V. Shargorodsky, Regulatory Affairs Engineer

The information accumulated herein is believed to be accurate, but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.