

MATERIAL SAFETY DATA SHEET

Manufacturer's Name: Crescent Bronze Powder Co., Inc.
3400 N. Avondale Ave.
Chicago, IL 60618-5432
800-445-6810 (Information)
800-535-5053 (Transportation Emergencies Only)

SECTION I: PRODUCT IDENTIFICATION

Product Name: Cres-Lite Metallic Pigments. (Gold bronze and/or copper pigments or powders)
Product Number: **Antique Colors-**20, 21, 25, 28, 69, 70, 83, 106, 244, 661, 805, and 2775
Designer Colors-81, 803, 852, 866, 867, 871
Vault Colors-V798-22, V798-23, V798-27, V798-30, V798-33, V798-34
Miscellaneous Colors-115
Custom Color- J-141, J-149, J-271, J-271S, J-253A

SECTION II: HAZARDOUS INGREDIENTS

Component	CAS#	% by wt. (1)	Exposure Limits (mg/M ³)		
			TLV/TWA	PEL	STEL
Copper (*)	7440-50-8	0-70	1	1	2
Zinc (*)	7440-66-6	0-17	5	N.E.	N.E.
Aluminum (*)	7429-90-5	0-85	10	15	5
Carbon Black	1333-86-4	5-15	3.5	N.E.	N.E.
Stearic Acid	57-11-4	.5-2	N.E.	N.E.	N.E.

* The products listed in section I contain these chemicals which are subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (SARA Title III) and 40 CFR 372.

Copper, Zinc and Aluminum also appear on the TSCA inventory list and have been assigned numbers A546-0888, B823-4379 and A072-7839 respectively.

(1) Weight ranges have been expressed in broad ranges for proprietary purposes.

SECTION III: PHYSICAL DATA

Boiling Range: Copper 4,653°F; Zinc 1,665°F; Aluminum 4766°F; Carbon Black 8720°F
Evaporation Rate: Not applicable
% Volatile by wt: None
Vapor pressure: Not applicable
Vapor Density: Not Applicable
Specific Gravity: Copper 8.92; Zinc 7.14; Aluminum 2.7; Carbon Black 1.8
Appearance and Odor: Metallic looking powder with little odor.

SECTION IV: FIRE & EXPLOSION INFORMATION

Flash point: Not applicable

Flammable Limits in Air (by vol.): Lower- Not Established

Upper- Not Established

D.O.T. Flammability Classification:

Metal Powders, Flammable N.O.S. (contains copper and or zinc), UN3089, Class 4.1, PG II. for items 20, 21, 25, 28, 69, 70, 83, 106, 244, 661, 805, 2775, V-798-22, V-798-23, V-798-27, V-798-30, V-798-33, V-798-34.

Aluminum Powder, Coated, UN1309, Class 4.1, PG II for items 81, 115, 803, 852, 866, 867, 871

Extinguishing Media: NFPA class D Dry Chemical equipped with a low velocity nozzle, Sand or another inert material may be used to smother burning pigment. Water may be used to cool closed containers if exposed to extreme heat. NEVER employ water as an extinguishing agent for items classed as UN1309 (see above). Water and aluminum, when combined, form hydrogen gas which can rapidly spread the fire. DO NOT use high velocity extinguishing agents on items classes as UN1309 since they may disturb the burning powder to create a potentially explosive dust cloud. Sand or another inert material should be used to ring or dike fire while allowing the contents to extinguish itself.

Firefighting Procedures: DO NOT use fire extinguishers containing halogenated hydrocarbons to extinguish burning material. Since this powder contains zinc, it may react with these agents to liberate hydrogen gas, which can spread the fire. Also, burning brass powder may react violently with these types of extinguishing agents. Firefighters should wear self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Aluminum powder in bulk form is stable, but when suspended as airborne particulate, can be potentially explosive. Use extreme care when handling products classified as UN1309. (See above)

SECTION V: HEALTH HAZARD DATA

Primary routes of entry: Skin & eye contact and breathing of airborne particulate.

Health Risks

Eyes & Skin: Copper & copper/zinc alloy dusts are eye and mucous membrane irritants and skin sensitizers. Acute exposure may cause redness of the eyes and dermatitis.

Inhalation: Prolonged exposure to airborne particulate may cause acute irritation of the nose and trachea resulting in a metallic taste or nasal ulceration. If expose to extremely high temperatures, zinc metal fumes can result in symptoms known as "metal fume fever".

Ingestion: Ingestion of copper compounds may cause vomiting and collapse. Acute poisoning is characterized by hemolysis, jaundice, anuria, hypertension and convulsions.

First Aid

Eyes: Flush eyes with plenty of water for 15 minutes. If irritation persists, seek medical attention. Avoid wearing of contact lenses.

Skin: Remove contaminated clothing and wash affected area with soap and warm water. If irritation persists, seek medical attention.

Inhalation: If breathing becomes difficult, leave area immediately and move to an area of fresh air. If breathing has stopped, begin artificial respiration procedures at once. Seek medical attention.

Ingestion: If swallowed, drink one or two glasses of water. DO NOT induce vomiting. Seek medical attention immediately.

Medical Conditions Prone to Aggravation by Exposure: Persons with pre-existing chronic respiratory problems and/or impaired pulmonary function could suffer increased discomfort. Additionally, persons with obstructive airway diseases, pre-existing kidney, liver, skin or blood disorders, or those having been diagnosed with Wilson's disease, may find their condition further aggravated by exposure to this product.

Carcinogenic Status: Not listed by NTP., IARC., or OSHA.

SECTION VI: REACTIVITY DATA

Stability: Product is stable in bulk form. As previously mentioned, airborne particulate (dust) can be potentially explosive. Use extreme caution when handling this product to avoid generating dust particulate. Aluminum will react with water to slowly generate hydrogen gas and heat. This reaction can be hazardous when attempting to store mixed product in a sealed container as a result of pressure build-up. DO NOT attempt to store finished mixtures of water-based mediums and those pigments referenced in section I.

Incompatibility: Strong alkalis, chlorates, bromates, mineral acids, strong oxidizing agents, silver chloride, iodates, chlorinated hydrocarbons, nitrites, nitrates, carbon disulfide, sodium peroxide plus carbon dioxide, sulfur dichloride, palladium, manganese, magnesium plus potassium chlorate, sodium carbonate, sulfates, diborane.

Hazardous Decomposition Products: Decomposition may yield hydrogen and noxious copper compounds.

Conditions to Avoid: See above.

Hazardous Polymerization: Will not occur.

SECTION VII: PRECAUTIONS FOR SAFE HANDLING AND USE

Small Spills: Small spills may be swept gently into a hazardous waste container. Avoid generating dust clouds. **Use non-sparking tools.**

Large Spills: Large spills should be handled in a similar manner. Avoid run-off into sewers, drains or other open bodies of water. Notify authorities if this has occurred.

Waste Disposal Methods: Dispose of in accordance with local, state and federal regulations.

Handling & Storage: Store product in an area away from extreme temperature conditions. Keep containers closed after use. **Keep dry.**

Other Precautions: KEEP AWAY FROM CHILDREN.

SECTION VIII: PROTECTION & CONTROL MEASURES

Respiratory Protection: Wear an appropriate (NIOSH approved) respirator during application if air monitoring demonstrates that airborne particulate exceeds recommended threshold limits.

Eye and Skin protection: Splash goggles and protective gloves are recommended to reduce the risk of eye and/or skin contact.

Ventilation: Ventilation sufficient in volume and pattern should be provided to keep air quality within approved OSHA levels.

Other Protective Clothing & Equipment: Eye wash and safety shower are recommended if using this product in large concentrations. Always wash hands thoroughly when finished using this

product.

SECTION IX: OTHER IMPORTANT INFORMATION

This information must be made available upon request and may be reproduced without permission.

Please read precautions and warning statements on product label.

The Hazardous Communication Identification System (HMIS) has been included for information purposes only. The recommendations represents here are based on criteria supplied by the developer of the system (National Paint & Coatings Assoc.- NPCA), suppliers of Crescent Bronze and our own interpretation of the data provided and should be used in conjunction with the users own evaluation.

HEALTH:	2
FLAMMABILITY:	2
REACTIVITY:	2
PERS. PROTECT:	E

DISCLAIMER OF LIABILITY

The statements contained herein are made only for the purpose of compliance with various regulatory requirements. While believed to be accurate, they do not in any way constitute an express or implied warranty of fitness for a particular purpose, merchantability, or any representation or guarantee whatsoever by Crescent Bronze Powder Company/Color FX. Users should make their own determination as to the suitability of this product for their particular use or purpose.