



Material Safety Data Sheet

81BA04-001 BRONZE BA GLAZE

1. Product and company identification

Code : 81BA04-001
Synonym : BRONZE BA GLAZE
Material uses : Coatings: Surface coatings and finishes.
Manufacturer : Chemcraft Coating Technology Inc.
311 Otterson Drive, Suite 60
Chico, CA 95928
Ph:530-894-3585 Fax:530-896-0657
In case of emergency : 1-800-424-5571
Validation date : 1/5/2006.
Print date : 5/31/2006.
Validator : A. Davis

2. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
Acetone	67-64-1	15 - 30
Isopropanol	67-63-0	5 - 15
Diethylene glycol monomethyl ether	111-77-3	0.1 - 1
N-Methyl pyrrolidone	872-50-4	0.1 - 1
Silica quartz	14808-60-7	0.1 - 1

Trace impurities and additional material names not listed above may appear in other sections of this MSDS. These materials may be listed for toxicological concerns, local compliance, or other reasons.

* Toxicological information, if available, is listed in section 11

3. Hazards identification

Physical state : Liquid.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Routes of entry : Dermal contact. Eye contact. Inhalation. Ingestion.

Effects of Acute Exposure : Risk of cancer depends on duration and level of exposure.

Potential chronic health effects : **CARCINOGENIC EFFECTS:** Classified A5 (Not suspected for humans.) by ACGIH, 4 (Probably not for humans.) by IARC, None. by OSHA [2-Propanone]. Classified D (Not classifiable for humans or animals.) by EPA [2-Propanone]. Classified A5 (Not suspected for humans.) by ACGIH, 4 (Probably not for humans.) by IARC, None. by OSHA [2-Propanol]. Classified 4 (Probably not for humans.) by IARC, None. by OSHA [Titanium dioxide (TiO₂)]. Classified 4 (Probably not for humans.) by IARC, None. by OSHA [Ethanol, 2-(2-methoxyethoxy)-]. Classified A5 (Not suspected for humans.) by ACGIH [2-Pyrrolidinone, 1-methyl-]. Classified 1 (Proven for humans.) by IARC, + (Proven.) by OSHA, + (Proven.) by NIOSH [Quartz (SiO₂)].
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Classified None. for humans [2-Propanone]. Teratogenic NOAEL [89 ppm] [2-Pyrrolidinone, 1-methyl-].

Medical conditions aggravated by over-exposure : Repeated or prolonged exposure to the substance can produce target organs damage.

See toxicological information (section 11)

4 . First aid measures

- Eye contact** : Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Skin contact** : Flush contaminated skin with plenty of water. Continue to rinse for at least 10 minutes. Get medical attention. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing or wear gloves. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Inhalation** : Get medical attention immediately. Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Ingestion** : Get medical attention immediately. Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

5 . Fire-fighting measures

- Flammability of the product** : Flammable.
- Products of combustion** : These products are carbon oxides (CO, CO₂). Some metallic oxides.
- Extinguishing media**
- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : No specific hazard.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Fire Hazards in Presence of Various Substances** : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.
Non-flammable in the presence of the following materials or conditions: shocks and mechanical impacts, oxidizing materials, reducing materials, combustible materials, organic materials, metals, acids, alkalis and moisture.
- Explosion Hazards in Presence of Various Substances** : Highly explosive in the presence of the following materials or conditions: open flames, sparks and static discharge.
Non-explosive in the presence of the following materials or conditions: heat, shocks and mechanical impacts, oxidizing materials, reducing materials, combustible materials, organic materials, metals, acids, alkalis and moisture.

6 . Accidental release measures

- Personal precautions** : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

7. Handling and storage

- Handling** : Wash thoroughly after handling.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area.

8. Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

- Engineering measures** : Use only with adequate ventilation. If user operations generate dust, fumes, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal protection



- Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

9. Physical and chemical properties

- Physical state** : Liquid.
- Flash point** : The lowest known value is Closed cup: -18°C (-0.4°F). (T.C.C.). (2-Propanone)
- Auto-ignition temperature** : The lowest known value is 432°C (809.6°F) (2-Propanol).
- Flammable limits** : The greatest known range is Lower: 2.6% Upper: 12.8% (2-Propanone)
- pH** : Neutral.
- Boiling/condensation point** : The lowest known value is 56.2°C (133.2°F) (2-Propanone). Weighted average: 83.93°C (183.1°F)
- Melting/freezing point** : May start to solidify at 0°C (32°F) based on data for: Water. Weighted average: -44.53°C (-48.2°F)
- Relative density** : Weighted average: 0.92 (Water = 1)
- Vapor pressure** : The highest known value is 24.1 kPa (181 mm Hg) (at 20°C) (2-Propanone). Weighted average: 9.02 kPa (67.66 mm Hg) (at 20°C)
- Vapor density** : The highest known value is 2.1 (Air = 1) (2-Propanol). Weighted average: 1.5 (Air = 1)
- Dispersibility properties** : Not dispersible in cold water, hot water.
See solubility in methanol, diethyl ether, n-octanol.
- Solubility** : Easily soluble in methanol, diethyl ether.
Partially soluble in n-octanol.
Insoluble in cold water, hot water.

10 . Stability and reactivity

- Stability and reactivity** : The product is stable.
- Incompatibility with various substances** : Reactive or incompatible with the following materials: oxidizing materials and acids.
Slightly reactive or incompatible with the following materials: reducing materials and alkalis.
Non-reactive or compatible with the following materials: combustible materials, organic materials, metals and moisture.

11 . Toxicological information

Toxicity data

<u>Product/ingredient name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
2-Propanone	LD50	5800 mg/kg	Oral	Rat
	LD50	3000 mg/kg	Oral	Mouse
	LD50	20000 mg/kg	Dermal	Rabbit.
	LC50	50100 mg/m ³ (8 hour/hours)	Inhalation	Rat
	LC50	44000 mg/m ³ (4 hour/hours)	Inhalation	Mouse
2-Propanol	LD50	5045 mg/kg	Oral	Rat
	LD50	4797 mg/kg	Oral	Dog
	LD50	3600 mg/kg	Oral	Mouse
	LD50	12800 mg/kg	Dermal	Rabbit
	LC50	16000 ppm (8 hour/hours)	Inhalation	Rat.

- Chronic effects on humans** : **CARCINOGENIC EFFECTS:** Classified A5 (Not suspected for humans.) by ACGIH, 4 (Probably not for humans.) by IARC, None. by OSHA [2-Propanone]. Classified D (Not classifiable for humans or animals.) by EPA [2-Propanone]. Classified A5 (Not suspected for humans.) by ACGIH, 4 (Probably not for humans.) by IARC, None. by OSHA [2-Propanol]. Classified 4 (Probably not for humans.) by IARC, None. by OSHA [Titanium dioxide (TiO₂)]. Classified 4 (Probably not for humans.) by IARC, None. by OSHA [Ethanol, 2-(2-methoxyethoxy)-]. Classified A5 (Not suspected for humans.) by ACGIH [2-Pyrrolidinone, 1-methyl-]. Classified 1 (Proven for humans.) by IARC, + (Proven.) by OSHA, + (Proven.) by NIOSH [Quartz (SiO₂)].
TERATOGENIC EFFECTS: Classified None. for humans [2-Propanone]. Teratogenic NOAEL [89 ppm] [2-Pyrrolidinone, 1-methyl-].
Contains material which causes damage to the following organs: blood, kidneys, lungs, the nervous system, liver.

- Other toxic effects on humans** : Hazardous in case of ingestion, of inhalation.
- Special remarks on chronic effects on humans** : Detected in maternal milk in human. (2-Propanol)
- Special remarks on other toxic effects on humans** : Material is irritating to mucous membranes and upper respiratory tract. (2-Propanone)
- Specific effects**
- Carcinogenic effects** : Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenic effects** : No known significant effects or critical hazards.
- Teratogenicity / Reproductive toxicity** : No known significant effects or critical hazards.

12. Ecological information

Ecotoxicity data

Canada

Product/ingredient name

2-Pyrrolidinone, 1-methyl-

Species

Trout (EC50)
 Fathead minnow. (EC50)
 Bluegill. (EC50)
 Daphnia (LC50)

Period

96 hour/hours
 96 hour/hours
 96 hour/hours
 96 hour/hours

Result

5104 mg/l
 4518 mg/l
 5656 mg/l
 3135 mg/l

- Environmental precautions** : No known significant effects or critical hazards.
- Octanol/water partition coefficient** : The product is more soluble in octanol.
- Bioconcentration factor** : Not available.
- Products of degradation** : These products are carbon oxides (CO, CO₂) and water. Some metallic oxides.
- Toxicity of the products of biodegradation** : The product itself and its products of degradation are not toxic.

13. Disposal considerations


- Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

<u>Regulatory information</u>	<u>UN number</u>	<u>Class</u>	<u>PG*</u>	<u>Label</u>
TDG Classification	1263PAINT	3	II	

PG*: Packing group

15. Regulatory information

United States

- HCS Classification** : Carcinogen
 Target organ effects
- U.S. Federal regulations** : SARA 302/304/311/312 extremely hazardous substances: Isopropyl alcohol
 SARA 302/304 emergency planning and notification: No products were found.
 SARA 302/304/311/312 hazardous chemicals: No products were found.
 SARA 311/312 MSDS distribution - chemical inventory - hazard identification:
 2-Propanol: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard
 Clean Water Act (CWA) 307: No products were found.
 Clean Water Act (CWA) 311: No products were found.

15 . Regulatory information

Clean Air Act (CAA) 112 accidental release prevention: Ethanol, 2-(2-methoxyethoxy)-; Ethanol, 2-butoxy-; Aqua-Chem Raw Umber

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

State regulations

: **WARNING:** This product contains chemical/chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.: Quartz (SiO₂); Carbon Black; 2-Pyrrolidinone, 1-methyl-

WARNING: This product contains chemical/chemicals known to the state of California to cause birth defects or other reproductive harm.: 2-Pyrrolidinone, 1-methyl-

WARNING: This product contains chemical/chemicals known to the state of California to cause cancer.: Quartz (SiO₂); Carbon Black

Pennsylvania RTK: Ethanol, 2-(2-methoxyethoxy)-; Ethanol, 2-butoxy-; Isopropyl alcohol; 2-Pyrrolidinone, 1-methyl-

Florida: 2-Pyrrolidinone, 1-methyl-

Minnesota: 2-Pyrrolidinone, 1-methyl-

Massachusetts RTK: Isopropyl alcohol; 2-Pyrrolidinone, 1-methyl-

New Jersey: Ethanol, 2-(2-methoxyethoxy)-; Ethanol, 2-butoxy-; Isopropyl alcohol; 2-Pyrrolidinone, 1-methyl-

TSCA 8(b) inventory: Ethanol, 2-(2-methoxyethoxy)-; Ethanol, 2-butoxy-; Aqua-Chem Raw Umber; Isopropyl alcohol

SARA 302/304/311/312 extremely hazardous substances: Isopropyl alcohol

SARA 311/312 MSDS distribution - chemical inventory - hazard identification:

2-Propanol: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard

CERCLA: Hazardous substances.: 2-Propanone: 5000 lbs. (2268 kg); 2-Pyrrolidinone, 1-methyl-;

Ingredient name

Cancer

Reproductive

No significant risk level

Maximum acceptable dosage level

2-Pyrrolidinone, 1-methyl-

No.

Yes.

No.

No.

Quartz (SiO₂)

Yes.

No.

No.

No.

Carbon Black

Yes.

No.

No.

No.

Canada

WHMIS (Canada)

: Class B-2: Flammable liquid

Class D-2A: Material causing other toxic effects (Very toxic).

Class D-2B: Material causing other toxic effects (Toxic).

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

16 . Other information

Label requirements

: EXTREMELY FLAMMABLE LIQUID AND VAPOR.

VAPOR MAY CAUSE FLASH FIRE.

CANCER HAZARD.

CONTAINS MATERIAL WHICH CAN CAUSE CANCER.

CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS:

BLOOD, KIDNEYS, LUNGS, NERVOUS SYSTEM, LIVER.

16 . Other information

Hazardous Material Information System (U.S.A)	Health	*	1
	Fire hazard		3
	Reactivity		0
	Personal protection		G

* Indicates may be chronic effects

National Fire Protection
Association (U.S.A)



Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.