

Safety Data Sheet



Chroma-Stain

Section 1

Product Description
Product Name: Chroma-Stain (all colors)
Recommended Use: Staining concrete
Supplier: ChemSystems, Inc. 10101 Genard Road Houston, TX 77041
P: 800.545.9827 • F: 713.329.9065 www.chemsystemsinc.net
Emergency Phone: CHEMTRAC 1-800-424-9300

Section 2

Hazard identification

Wheat Colors:

Skin Corrosive: Category 1B
Acute Oral Toxicity: Category 3



Signal Word:

Danger

Hazard Statements:

H301 Toxic if swallowed
H312 Harmful in contact with skin
H314 Causes severe skin burns and eye damage
H332 Harmful if inhaled
H290 May be corrosive to metals

Precautionary Statements:

Prevention:

P233 Keep container tightly closed
P220 Keep/Store away from clothing
P261 Avoid breathing mist
P270 Do not eat, drink, or smoke while using this product
P271 Use only outdoors or in a well-ventilated environment
P273 Avoid release to the environment
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P284 Upper respiratory protection
P264 Wash skin thoroughly after handling

Response:

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P352 IF ON SKIN: Wash with plenty of water

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing

Bluegrass, Neptune, & Jade Colors:

Safety Data Sheet



Skin Corrosive: Category 1B
Acute Oral Toxicity: Category 3
Acute Aquatic Toxicity: Category 1
Chronic Aquatic Toxicity: Category 2



Signal Word:

Danger

Hazard Statements:

H301 Toxic if swallowed
H312 Harmful in contact with skin
H314 Causes severe skin burns and eye damage
H332 Harmful if inhaled
H290 May be corrosive to metals
H410 Very toxic to aquatic life with long-lasting effects

Precautionary Statements:

Prevention:

P233 Keep container tightly closed
P220 Keep/Store away from clothing
P261 Avoid breathing mist
P270 Do not eat, drink, or smoke while using this product
P271 Use only outdoors or in a well-ventilated environment
P273 Avoid release to the environment
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P284 Upper respiratory protection
P264 Wash skin thoroughly after handling

Response:

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P352 IF ON SKIN: Wash with plenty of water

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing

All other colors:

Skin Corrosive: Category 1B
Acute Oral Toxicity: Category 3
Acute Dermal Toxicity: Category 4
Germ Cell Mutagenicity: Category 1B
Reproductive Toxicity: Category 1B
Acute Aquatic Toxicity: Category 1

Safety Data Sheet



Signal Word:

Danger

Hazard Statements:

H301 Toxic if swallowed
 H312 Harmful in contact with skin
 H314 Causes severe skin burns and eye damage
 H332 Harmful if inhaled
 H290 May be corrosive to metals
 H351 Suspected of causing cancer
 H341 Suspected of causing genetic defects
 H400 Very toxic to aquatic life

Precautionary Statements:

Prevention:

P233 Keep container tightly closed
 P220 Keep/Store away from clothing
 P261 Avoid breathing mist
 P270 Do not eat, drink, or smoke while using this product
 P271 Use only outdoors or in a well-ventilated environment
 P273 Avoid release to the environment
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P284 Upper respiratory protection
 P264 Wash skin thoroughly after handling

Response:

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P302+P352 IF ON SKIN: Wash with plenty of water

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing

Section 3 Composition/ Information on Ingredients

Color	Component	CAS No.	OSHA PEL(TWA)	ACGIH(TLV-TWA)	Weight %
Bluegrass	Hydrochloric Acid	7647-01-0	5 ppm	5 ppm	2.0
	Cupric Chloride	10125-13-0	1 mg/m ³	1 mg/m ³	25.0
	Water	7732-18-5	Not Established	Not Established	85.0
Ember	Hydrochloric Acid	7647-01-0	5 ppm	5 ppm	1.5
	Ferrous Chloride	13478-10-9	None Listed	1 mg/m ³	35.0
	Sodium Dichromate	7789-12-0	0.005 mg/m ³	0.05 mg/m ³	1.0
	Water	7732-18-5	Not Established	Not Established	75.0
Adobe	Ferric Chloride	10025-77-1	None Listed	1 mg/m ³	25.0
	Sodium Dichromate	7789-12-0	0.005 mg/m ³	0.05 mg/m ³	7.0
	Water	7732-18-5	Not Established	Not Established	90.0
Jade	Hydrochloric Acid	7647-01-0	5 ppm	5 ppm	2.0
	Ferric Chloride	10025-77-1	None Listed	1 mg/m ³	10.0



Safety Data Sheet

	Cupric Chloride	10125-13-0	1 mg/m ³	1 mg/m ³	25.0
	Sodium Dichromate	7789-12-0	0.005 mg/m ³	0.05 mg/m ³	2.5
	Water	7732-18-5	Not Established	Not Established	85.0
Kodiak	Hydrochloric Acid	7647-01-0	5 ppm	5 ppm	5.0
	Sodium Dichromate	7789-12-0	0.005 mg/m ³	0.05 mg/m ³	4.7
	Ferrous Chloride	13478-10-9	None Listed	1 mg/m ³	15.0
	Manganese Chloride	13446-34-9	5 mg/m ³	200 ppm	15.0
	Water	7732-18-5	Not Established	Not Established	85.0
Onyx	Hydrochloric Acid	7647-01-0	5 ppm	5 ppm	3.0
	Ferrous Chloride	13478-10-9	None Listed	1 mg/m ³	10.0
	Manganese Chloride	13446-34-9	5 mg/m ³	200 ppm	15.0
	Sodium Dichromate	7789-12-0	0.005 mg/m ³	0.05 mg/m ³	13.5
	Water	7732-18-5	Not Established	Not Established	85.0
Neptune	Hydrochloric Acid	7647-01-0	5 ppm	5 ppm	2.0
	Cupric Chloride	10125-13-0	1 mg/m ³	1 mg/m ³	25.0
	Sodium Dichromate	7789-12-0	0.005 mg/m ³	0.05 mg/m ³	1.0
	Water	7732-18-5	Not Established	Not Established	85.0
Wheat	Hydrochloric Acid	7647-01-0	5 ppm	5 ppm	2.0
	Ferrous Chloride	13478-10-9	None Listed	1 mg/m ³	20.0
	Water	7732-18-5	Not Established	Not Established	90.0

Section 4 First Aid Measures

Emergency First Aid Procedures

Skin: Remove contaminated clothing and rinse the affected area for at least 20 minutes. Thoroughly wash with soap and water until no evidence of the chemical remains. For chemical burns, cover with proper dressing and bandage. Call a physician.

Eyes: Flush with water for 20 minutes lifting upper and lower eyelids occasionally. Continue irrigation with normal saline until pH returns to normal. Call a physician.

Inhalation: Remove to fresh air. Administer artificial respiration if necessary. Call a physician.

Ingestion: Drink large amounts of water or milk to dilute the acids. If vomiting persists, take fluids repeatedly. Ingested acid must be diluted 100:1 to render harmless to tissues.

Section 5 Firefighting Procedures

Extinguishing Media: Dry chemical, alcohol-resistant foam, or CO₂

Flash Point (TCC): N/A

Flammable Limits (% volume in air for solvents): LEL: Not Determined UEL: Not Determined

Special Fire Fighting Procedures: Reactions with metals and water can liberate hydrogen gas and may form explosive mixture in the air. At high temperatures toxic corrosive fumes of anhydrous gas may be emitted. Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face-piece operated in pressure-demand or positive-pressure mode.

Section 6 Spill or Leak Procedures

Small Spills: Spills may be absorbed using cement powder or fly ash and shoveled into containers. Neutralize spills with lime, sodium bicarbonate or crushed limestone and prevent runoff. Notify proper authorities if runoff should occur.

Large Spill Containment: For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.

Cleanup: Spills may be absorbed using cement powder or fly ash and shoveled into containers. Neutralize spills with lime, sodium bicarbonate or crushed limestone and prevent runoff. Notify proper authorities if runoff should occur.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Disposal Regulatory Requirements: Follow applicable Federal, state, and local regulations.

Container Cleaning and Disposal: Containers must not be washed out or used for other purposes. Do not weld or flame cut empty containers.

Section 7 Handling and Storage

Normal Handling: Keep away from chlorine-type bleaches and other household chemicals. Use only in well ventilated areas.

Storage: Store material in its original container. Keep containers tightly closed when not in use.

Waste Disposal Method: Dispose of material in accordance with federal, state, and local guidelines.

Safety Data Sheet



Special Precautions: Avoid breathing mist. Avoid freezing.

Section 8 Protection Information

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear an OSHA/NIOSH approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contaminations, and presence of sufficient oxygen. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA.

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact.

Eye Protection: Wear protective eyeglasses or chemical safety goggles, per OSHA eye and face protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Safety Stations: Make emergency eyewash stations, safety/quick drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 Physical Data

Appearance: Colored liquid

Odor: Chloride odor

Odor Threshold: No data available

pH: <1

Melting Point: Not determined

Freezing Point: <32° F

Boiling Point: 215° F (102 °C)

Flash Point: N/A

Evaporation Rate: Not determined

Flammability (solid, gas): Non-flammable under normal conditions

Upper/lower Flammability: N/A

Vapor Pressure: H2O

Vapor Density: Equal to water

Relative Density:

Water Solubility: 100%

Partition Coefficient: No data available

Auto-ignition Temperature: N/A

Decomposition temperature: Not determined

Viscosity: 1.004 centistokes (20° C)

Specific Gravity (H2O=1, at 4 °C): 1.03-1.30

Section 10 Reactivity Data

Reactivity: Acid Stain is stable at room temperature in closed containers under normal storage and handling conditions

Conditions to avoid: Heat, open flame, reactive metals, and strong oxidizers.

Incompatibility (Materials to Avoid): Contact with common metals, including aluminum or magnesium, may produce hydrogen which may form explosive mixtures in the air.

Hazardous Decomposition (Byproducts): Thermal oxidative decomposition of Acid Stain can produce toxic and hazardous gases including fumes of hydrogen chloride and oxides of copper.

Hazardous Polymerization: Hazardous polymerization cannot occur under normal temperatures and pressures.

Section 11 Toxicity Data

Routes of Exposure: Inhalation, ingestion, eyes, and skin.

Acute Toxicity Lethal Doses:

Sodium Dichromate: LC50 (inhl, 4h) Rat 124 mg/m3

Safety Data Sheet

	LD50 (oral) Rat 51 mg/kg LD50 (skin) Rabbit 1000 mg/kg
Cupric Chloride:	LC50 (inhl) No data available LD50 (oral) Rat 584 mg/kg LD50 (skin) No data available
Manganese Chloride:	LC50 (inhl) No data available LD50 (oral) Rat 1484 mg/kg LD50 (skin) No data available
Ferric Chloride:	LC50 (inhl) No data available LD50 (oral) Rat 316 mg/kg LD50 (skin) No data available
Ferrous Chloride:	LC50 (inhl) No data available LD50 (oral) No data available LD50 (skin) No data available
Hydrochloric Acid:	LC50 (inhl, 30 min.) Rat 6400 mg/m ³ LD50 (oral) Rabbit 900 mg/kg LD50 (skin) Rabbit >5010 mg/kg

Skin Contact: Severe irritation, inflammation, ulceration, necrosis and burns with permanent damage.

Eye Contact: May cause severe irritation, impairment and permanent damage.

Inhalation: Burning sensation in the throat, coughing and choking.

Ingestion: Burns of the mouth, throat, esophagus and stomach with consequent pain, uneasiness, nausea, vomiting, diarrhea, chills and intense thirst.

Carcinogen: IARC and NTP have determined that there is sufficient evidence for the carcinogenicity of hexavalent chromium compounds both in humans and experimental animals. However, the hexavalent chromium compounds responsible (for human carcinogenicity) cannot be specified. There is laboratory evidence that aqueous sodium bichromate administered directly into the lung, at the highest tolerated dose, over the lifetime of rats, causes a significant increased incidence of lung cancer. Sodium Bichromate contains hexavalent chromium, which is classified as an IARC (Group I) carcinogen and a known carcinogen by NTP.

Aggravation of Pre-existing Conditions: Inhalation of fumes may aggravate existing lung problems.

Section 12

Ecological Data

Sodium Dichromate:	Acute Toxicity to Fish: LC50 (96 hr) 31 mg/L (Fathead minnow)
Cupric Chloride:	Harmful to aquatic life in very low concentrations. Do not allow to enter waterways.
Manganese Chloride:	No data available
Ferric Chloride:	Acute Toxicity to Fish: LC50 (96 hr) 6 mg/L (Striped bass) Acute Toxicity to Aquatic Invertebrates: EC50 (96 hr) 15 mg/L (Daphnia magna)
Ferrous Chloride:	No data available
Hydrochloric Acid:	Acute Toxicity to Fish: LC50 (96 hr) 282 mg/L (Mosquito fish) Acute Toxicity to Aquatic Invertebrates: EC50 (48 hr) 100-300 ppm (shrimp, salt water)

Persistence and Degradability: No data available

Bioaccumulation Potential: Potential for bioaccumulation of metals

Mobility in the Soil: Highly mobile in wet soil

Other Adverse Effects: None

Section 13

Disposal Information

Safety Data Sheet

Waste Disposal Method: Dispose of material in accordance with all Federal, State, and Local regulations.

Section 14 Transport Information

US DOT:

Proper Shipping Name: Corrosive Liquid, Acidic, Inorganic, N.O.S. (Hydrochloric Acid)

Hazard Class: 8

UN: UN3264

Packing Group: PGIII

Marine Pollutant: No

RQ: (cupric chloride) only in 5-gallon containers or larger for Jade, Neptune, and Bluegrass colors.

IATA:

Proper Shipping Name: Corrosive Liquid, Acidic, Inorganic, N.O.S. (Hydrochloric Acid)

Hazard Class: 8

UN: UN3264

Packing Group: PGIII

Marine Pollutant: No

IMO:

Proper Shipping Name: Corrosive Liquid, Acidic, Inorganic, N.O.S. (Hydrochloric Acid)

Hazard Class: 8

UN: UN3264

Packing Group: PGIII

Marine Pollutant: Limited Quantity Exempt in 1-gallon containers

Section 15 Regulatory Information

RCRA Hazardous Waste Number (40 CFR 261.33): Possibly D002 or D007

<u>Component</u>	<u>CAS#</u>	<u>SARA 313</u>	<u>SARA311/312</u>
Hydrochloric Acid	7647-01-0	Yes	Yes (Acute)
Manganese Chloride	13446-34-9	Yes	Yes (Acute, Chronic)
Sodium Dichromate	7789-12-0	Yes	Yes (Acute, Chronic)
Ferric Chloride	10025-77-1	No	Yes (Acute)
Copper (II) Chloride	10125-13-0	Yes	Yes (
Ferrous Chloride	7758-94-3	No	Yes (Acute)

State Regulations: Consult individual state agency for further information.

California Prop. 65: This product contains chemical(s) known to the state of California to cause cancer and/or birth defects.

Chromium (hexavalent compounds) contained in Taupe, Patina, Onyx, Kodiak, Jade, Graphite, Garnet, Copper, Cocoa, Bronze, and Amber colors.

Section 16 Additional Information

The regulatory information provided is not intended to be comprehensive. Other Federal, State and Local regulations may apply to this material.

DISCLAIMER: Although the information and recommendations set forth herein are presented in good faith and believed to be correct as of the date hereof, manufacturer makes no representations as to the completeness or accuracy thereof.