



EUCLID CHEMICAL

Version: 1.0
Revision Date: 09/29/2015

SAFETY DATA SHEET

1. Identification

Material name: STAIN-CRETE CHEM STAIN - 1 GL T.COTTA

Material: CSCR G001 875

Recommended use and restriction on use

Recommended use: Additive

Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

EUCLID CHEMICAL COMPANY
19218 REDWOOD ROAD
CLEVELAND OH 44110
US

Contact person:

EH&S Department

Telephone:

216-531-9222

Emergency telephone number:

1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards

| | |
|---|-------------|
| Acute toxicity (Oral) | Category 3 |
| Acute toxicity (Dermal) | Category 4 |
| Acute toxicity (Inhalation - dust and mist) | Category 2 |
| Skin Corrosion/Irritation | Category 1A |
| Serious Eye Damage/Eye Irritation | Category 1 |
| Respiratory sensitizer | Category 1 |
| Skin sensitizer | Category 1 |
| Germ Cell Mutagenicity | Category 1B |
| Carcinogenicity | Category 1A |
| Toxic to reproduction | Category 1B |

Unknown toxicity - Health

| | |
|--|---------|
| Acute toxicity, oral | 63.9 % |
| Acute toxicity, dermal | 63.9 % |
| Acute toxicity, inhalation, vapor | 100 % |
| Acute toxicity, inhalation, dust or mist | 84.69 % |

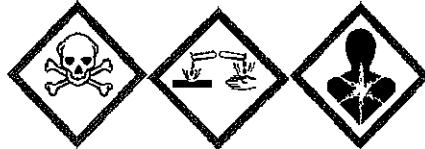
Unknown toxicity - Environment

| | |
|--|---------|
| Acute hazards to the aquatic environment | 96.89 % |
| Chronic hazards to the aquatic environment | 100 % |

Label Elements



Hazard Symbol:



Signal Word:

Danger

Hazard Statement:

Fatal if inhaled.
Toxic if swallowed.
Harmful in contact with skin.
Causes severe skin burns and eye damage.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
May cause genetic defects.
May cause cancer.
May damage fertility or the unborn child.

Precautionary Statement:

Prevention:

Do not breathe dust or mists. Use only outdoors or in a well-ventilated area. [In case of inadequate ventilation] wear respiratory protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing must not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Specific treatment is urgent (see this label). Wash contaminated clothing before reuse.

Storage:

Store in well-ventilated place. Keep container tightly closed. Store locked up.

Disposal:

Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in GHS classification:

None.

3. Composition/information on ingredients

**Mixtures**

| Chemical Identity | CAS number | Content in percent (%)* |
|------------------------------|------------|-------------------------|
| Ferric Chloride | 7705-08-0 | 15 - 40% |
| Chromic acid , disodium salt | 10588-01-9 | 15 - 40% |
| Hydrogen chloride | 7647-01-0 | 3 - 7% |

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

| | |
|----------------------|---|
| Ingestion: | Rinse mouth. Call a physician or poison control center immediately. Never give liquid to an unconscious person. Do not induce vomiting without advice from poison control center. |
| Inhalation: | Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. Move to fresh air. If breathing is difficult, give oxygen. |
| Skin Contact: | Call a physician or poison control center immediately. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention. |
| Eye contact: | Remove contact lenses, if present and easy to do. Continue rinsing. Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately. |

Most important symptoms/effects, acute and delayed

| | |
|------------------|---|
| Symptoms: | Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. Extreme irritation of eyes and mucous membranes, including burning and tearing. |
|------------------|---|

Indication of immediate medical attention and special treatment needed

| | |
|-------------------|--------------------------|
| Treatment: | Symptoms may be delayed. |
|-------------------|--------------------------|

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

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| Suitable extinguishing media: | Use fire-extinguishing media appropriate for surrounding materials. |
| Unsuitable extinguishing media: | Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical: | During fire, gases hazardous to health may be formed. |



Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away. Ventilate closed spaces before entering them. Evacuate area. Keep upwind.

Methods and material for containment and cleaning up: Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling: Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling. Do not taste or swallow. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Do not get in eyes. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, on clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities: Store locked up.

8. Exposure controls/personal protection

**Control Parameters
Occupational Exposure Limits**

| Chemical Identity | type | Exposure Limit Values | Source |
|--------------------------------------|------|-----------------------|--|
| Ferric Chloride - as Fe | TWA | 1 mg/m3 | US. ACGIH Threshold Limit Values (2011) |
| Chromic acid , disodium salt - as Cr | TWA | 0.05 mg/m3 | US. ACGIH Threshold Limit Values (2011) |
| Chromic acid , disodium salt | TWA | 0.005 mg/m3 | US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) (02 2006) |



| | | | |
|-------------------|--------------|-----------------|---|
| | OSHA_A CT | 0.0025 mg/m3 | US. OSHA Specifically Regulated Substances (29 CFR 1910.1001- 1050) (02 2006) |
| | Ceiling | 0.1 mg/m3 | US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006) |
| Hydrogen chloride | Ceiling | 2 ppm | US. ACGIH Threshold Limit Values (2011) |
| | Ceiling | 5 ppm 7 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |

| Chemical name | type | Exposure Limit Values | Source |
|---|---------|-----------------------|---|
| Ferric Chloride - as Fe | TWA | 1 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | STEL | 2 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Ferric Chloride - as Fe | TWAEV | 1 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Ferric Chloride - as Fe | TWA | 1.0 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| Chromic acid , disodium salt - as Cr | TWA | 0.025 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | CEILING | 0.1 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |



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|---|---------|-----------------------------|---------------------------|---|
| Chromic acid , disodium salt - as Cr | TWAEV | | 0.05 mg/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Chromic acid , disodium salt - as Cr | TWA | | 0.05 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| Hydrogen chloride | CEILING | 2 ppm | | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Hydrogen chloride | CEV | 2 ppm | | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Hydrogen chloride | CEILING | 5 ppm 7.5 mg/m ³ | | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |

Biological Limit Values

| Chemical Identity | Exposure Limit Values | Source |
|---|-----------------------|---------------------|
| Chromic acid , disodium salt (Total chromium: Sampling time: End of shift at end of work week.) | 25 µg/l (Urine) | ACGIH BEL (03 2013) |
| Chromic acid , disodium salt (Total chromium: Sampling time: Increase during shift.) | 10 µg/l (Urine) | ACGIH BEL (03 2013) |

**Appropriate Engineering
Controls**

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment**General information:**

Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Eye/face protection:

Wear a full-face respirator, if needed. Wear safety glasses with side shields (or goggles) and a face shield.

Skin Protection**Hand Protection:**

Use suitable protective gloves if risk of skin contact.

Other:

Wear chemical-resistant gloves, footwear, and protective clothing



appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

Hygiene measures: Avoid contact with skin. Observe good industrial hygiene practices. Do not eat, drink or smoke when using the product. Wash hands after handling. Wash hands before breaks and immediately after handling the product. Do not get in eyes. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Wash contaminated clothing before reuse. Do not get this material in contact with skin. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

| | |
|--|---|
| Physical state: | liquid |
| Form: | liquid |
| Color: | Tan |
| Odor: | Mild sour/acidic |
| Odor threshold: | No data available. |
| pH: | < 1 |
| Melting point/freezing point: | No data available. |
| Initial boiling point and boiling range: | No data available. |
| Flash Point: | No data available. |
| Evaporation rate: | Slower than Ether |
| Flammability (solid, gas): | No |
| Upper/lower limit on flammability or explosive limits | |
| Flammability limit - upper (%): | No data available. |
| Flammability limit - lower (%): | No data available. |
| Explosive limit - upper (%): | No data available. |
| Explosive limit - lower (%): | No data available. |
| Vapor pressure: | No data available. |
| Vapor density: | Vapors are heavier than air and may travel along the floor and in the bottom of containers. |
| Relative density: | 1.3013 |
| Solubility(ies) | |
| Solubility in water: | Miscible with water. |
| Solubility (other): | No data available. |
| Partition coefficient (n-octanol/water): | No data available. |
| Auto-ignition temperature: | No data available. |
| Decomposition temperature: | No data available. |



Viscosity: No data available.

10. Stability and reactivity

Reactivity: No data available.

Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous reactions: No data available.

Conditions to avoid: Avoid heat or contamination.

Incompatible Materials: Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates). Metals. Strong bases.

Hazardous Decomposition Products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Ingestion: Toxic if swallowed.

Inhalation: In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.

Skin Contact: Harmful in contact with skin. Causes severe skin burns. May cause an allergic skin reaction.

Eye contact: Causes serious eye damage.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral Product: ATEmix: 201.97 mg/kg

Dermal Product: ATEmix: 1,604.58 mg/kg

Inhalation Product: ATEmix: 0.26 mg/l

Repeated dose toxicity Product: No data available.

Skin Corrosion/Irritation Product: No data available.

**Serious Eye Damage/Eye Irritation****Product:** No data available.**Specified substance(s):**

Ferric Chloride Irritating

Chromic acid ,
disodium salt Irritating

Hydrogen chloride in vivo (Rabbit, 1 hrs): Category 1

Respiratory or Skin Sensitization**Product:** May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause sensitization by inhalation.**Carcinogenicity****Product:** No data available.**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**Chromic acid ,
disodium salt Overall evaluation: Carcinogenic to humans.**US. National Toxicology Program (NTP) Report on Carcinogens:**Chromic acid , Known To Be Human Carcinogen.
disodium salt**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**Chromic acid ,
disodium salt Cancer**Germ Cell Mutagenicity****In vitro****Product:** No data available.**In vivo****Product:** No data available.**Reproductive toxicity****Product:** May damage fertility or the unborn child.**Specific Target Organ Toxicity - Single Exposure****Product:** No data available.**Specific Target Organ Toxicity - Repeated Exposure****Product:** No data available.**Aspiration Hazard****Product:** No data available.



Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Hydrogen chloride LC 50 (Western mosquitofish (*Gambusia affinis*), 96 h): 282 mg/l Mortality

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Ferric Chloride LC 50 (Water flea (*Daphnia magna*), 24 h): 84 mg/l Mortality
LD 50 (Water flea (*Daphnia magna*), 24 h): +/- +/- 35 mg/l Mortality

Chromic acid , disodium salt LC 50 (Water flea (*Daphnia magna*), 24 h): 0.487 mg/l Mortality

Hydrogen chloride LC 50 (Green or European shore crab (*Carcinus maenas*), 48 h): 240 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Ferric Chloride NOAEL (Pimephales promelas, 33 d): 0.32 mg/l experimental result

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.



Bioaccumulative Potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s):

Ferric Chloride Plaice, sand dab (*Pleuronectes platessa*), Bioconcentration Factor (BCF): 8
(Not reported)

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

13. Disposal considerations

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Contaminated Packaging: No data available.

14. Transport information

TDG:

UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrochloric Acid), 8, PG III

CFR / DOT:

UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric Acid), 8, PG III

IMDG:

UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrochloric Acid), 8, PG III

Further Information:

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Chemical Identity

Chromic acid, disodium salt

Reportable quantity

De minimis concentration: 0.1% Annual Export Notification required.



US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

| <u>Chemical Identity</u> | <u>OSHA hazard(s)</u> |
|------------------------------|--|
| Chromic acid , disodium salt | Eye irritation Skin sensitization Cancer |

CERCLA Hazardous Substance List (40 CFR 302.4):

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|------------------------------|----------------------------|
| Ferric Chloride | 1000 lbs. |
| Chromic acid , disodium salt | 10 lbs. |
| Hydrogen chloride | 5000 lbs. |
| Sulfuric acid | 1000 lbs. |

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

- Immediate (Acute) Health Hazards
- Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance

| <u>Chemical Identity</u> | <u>Reportable quantity</u> | <u>Threshold Planning Quantity</u> |
|--------------------------|----------------------------|------------------------------------|
| Hydrogen chloride | 5000 lbs. | 500 lbs. |
| Sulfuric acid | 1000 lbs. | 1000 lbs. |

SARA 304 Emergency Release Notification

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|------------------------------|----------------------------|
| Ferric Chloride | 1000 lbs. |
| Chromic acid , disodium salt | 10 lbs. |
| Hydrogen chloride | 5000 lbs. |
| Sulfuric acid | 1000 lbs. |

SARA 311/312 Hazardous Chemical

| <u>Chemical Identity</u> | <u>Threshold Planning Quantity</u> |
|------------------------------|------------------------------------|
| Hydrogen chloride | 500lbs |
| Sulfuric acid | 500lbs |
| Ferric Chloride | 500 lbs |
| Chromic acid , disodium salt | 500 lbs |

SARA 313 (TRI Reporting)

| <u>Chemical Identity</u> |
|------------------------------|
| Chromic acid , disodium salt |
| Hydrogen chloride |

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|--------------------------|----------------------------|
|--------------------------|----------------------------|



Hydrogen chloride 15000 lbs
Hydrogen chloride 5000 lbs
Sulfuric acid 10000 lbs

US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

Ferric Chloride
Chromic acid , disodium salt
Hydrogen chloride

US. Massachusetts RTK - Substance List

Chemical Identity

Ferric Chloride
Chromic acid , disodium salt
Hydrogen chloride
Sulfuric acid

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Ferric Chloride
Chromic acid , disodium salt
Hydrogen chloride

US. Rhode Island RTK

Chemical Identity

Ferric Chloride
Chromic acid , disodium salt
Hydrogen chloride

Other Regulations:

**Regulatory VOC (less water
and exempt solvent):** 0 g/l
VOC Method 310: 0.00 %

Inventory Status:

Australia AICS:

All components in this product are listed on or exempt from the Inventory.

Canada DSL Inventory List:

All components in this product are listed on or exempt from the Inventory.

EINECS, ELINCS or NLP:

All components in this product are listed on or exempt from the Inventory.

Japan (ENCS) List:

One or more components in this product are not listed on or exempt from the Inventory.



| | |
|--|--|
| China Inv. Existing Chemical Substances: | All components in this product are listed on or exempt from the Inventory. |
| Korea Existing Chemicals Inv. (KECI): | All components in this product are listed on or exempt from the Inventory. |
| Canada NDSL Inventory: | One or more components in this product are not listed on or exempt from the Inventory. |
| Philippines PICCS: | All components in this product are listed on or exempt from the Inventory. |
| US TSCA Inventory: | All components in this product are listed on or exempt from the Inventory. |
| New Zealand Inventory of Chemicals: | All components in this product are listed on or exempt from the Inventory. |
| Japan ISHL Listing: | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan Pharmacopoeia Listing: | One or more components in this product are not listed on or exempt from the Inventory. |

16. Other information, including date of preparation or last revision

| | |
|-----------------------------|---|
| Revision Date: | 09/29/2015 |
| Version #: | 1.0 |
| Further Information: | No data available. |
| Disclaimer: | For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition. |