According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Version: 1.1

1

Revision: 4/26/2022

Trade Name: CHEM-STONE[™] Reactive Stain (various colors)

Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier Trade Name: CHEM-STONE™

1.2 Article No.: CHEM-STONE™

1.3 Details of the supplier of the Safety Data Sheet Manufacturer:

Elite Crete Systems 1151 Transport Drive Valparaiso, IN 46383 Toll Free: 888.323.4445 Tel: (219) 465-7671 <u>elitecrete.com</u>

1.4 Emergency telephone number:

CHEMTREC US DOMESTIC: (800-424-9300) CHEMTREC INTERNATIONAL: (703-527-3887)

2 Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with CFR 1910 (OSHA HCS) and EU DIRECTIVES 67/548/EEC or 1999/45/EC

The product is classified as hazardous according to EU parliament and councils directive 1999/45/EF.

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008: Hazard pictograms:



Signal word: Danger

Hazard statements:

May cause cancer. Harmful if swallowed. Causes severe skin burns and eye damage. May cause blindness.

Precautionary	statements:
---------------	-------------

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P260	Do not breath dust/fumes/gas/mist/vapors/spray
P264	Wash skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P280	Wear protective gloves, /clothing protection, eye protection, face mask protection and foot Protection

According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Version: 1.1

Revision: 4/26/2022

Trade Name: CHEM-STONE™ Reactive Stain (various colors)

P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P303+P361+P353	IF ON SKIN (or hair): Remove/Takeoff immediately all contaminated clothing.
	Rinse skin with water (shower) THROUGHLY AND CONTINUOUSLY UNTIL
	ALL RESIDUE IS FLUSHED OFF BODY
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove
	contact lenses, if present and easy to do. Continue rinsing
P308+P313	IF exposed or concerned: Get medical advice/attention
P309+P311	IF exposed or if you feel unwell: Call a POISON CENTER or
	doctor/physician
P501	Dispose of contents/container to an approved waste disposal plant

Hazard description:

Canadian WHMIS Classification: none listed

WHMIS Symbols::



NFPA (U.S.A.) ratings (scale 0 - 4)



Health =3 Fire = 0 Reactivity = 1

Material is not flammable itself however reactions may liberate flammable hydrogen gas HMIS (U.S.A.) ratings (scale 0 - 4)



Health = 3 Fire 0 Reactivity = 2

2.3 Other hazards not otherwise classified (HNOC) or not covered by GHS

None known

3 Composition/information on ingredients

3.2 Mixture.

Hazardous components:

Identification #	Description	WT. %
CAS: # 7758-99-0, 7758-95-3, 7705-08-0, 10588-01-9, 10025-73-7,7773-01- 550925-66-1, 7447-39-4	May contain one of more of the following metal lons: Chromium(III), Chloride Hexahydrate, Manganese Chloride, Sodium Dichromate, Chromic Chloride, Cupric Chloride, Ferrous Chloride GHS Classification: Not Dangerous	5-20%

According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Version: 1.1

Revision: 4/26/2022

Trade Name: CHEM-STONE™ Reactive Stain (various colors)

EINECS: 7786-30-3		
CAS: # 7647-01-0 EINECS: 231-595-7	Hydrochloric Acid (Only one of the two listed acids will be used in a given product,) C;R35**	12-18%
CAS: #7664-38-2	Phosphoric Acid (Only one of the two listed acids will be used in a given product, C;R35	12-18%
CAS: #7732-18-5	Water	55-74%

* Symbol and R phrase according to EC Annex1

** Subject to the reporting requirements of SARAH Title III Section 313

4 First aid measures

4.1 Description of first aid measures

After inhalation:

If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention immediately.

After skin contact:

Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing. Launder contaminated clothing before re-use.

After eye contact:

If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention. Remove eye contacts if easy to do so. Seek medical attention immediately

After swallowing:

If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. **Never induce vomiting** or give diluents

Give large amounts of water or milk to a CONSCIOUS PERSON. <u>Never give (milk or water) to</u> <u>someone who is unconscious</u>, having convulsions, or who cannot swallow. Seek medical advice immediately.. Take a copy of the label and/or MSDS with the victim to the health professional.

4.2 Most important symptoms and effects, both acute and delayed.

Acute: This material may cause irritation to skin and eyes. Product may cause an allergic skin reaction. **Chronic:** Prolonged or repeated skin contact may cause skin reaction product can be removed with water wash exposed skin thoroughly. Seek medical attention if symptoms arise.

Target Organs: Acute: Eye, Skin lungs Chronic: Skin, lungs

Hazards: Pre-existing skin or eye problems may be aggravated by exposure to this product.

4.3 Indication of any immediate medical attention and special treatment needed:

Treat symptoms and reduce over-exposure.

According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Version: 1.1

Revision: 4/26/2022

Trade Name: CHEM-STONE[™] Reactive Stain (various colors)

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: dry chemical, water spray, alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture: no further relevant information available

Hazardous decomposition products: hydrogen gas (see next line below)

Flammability: Material is not flammable itself, HOWEVER reaction could generate flammable hydrogen gas.

Protective Equipment: Firefighters should always wear NIOSH/MISHA approved self-contained breathing apparatus and full protective clothing.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**: Personnel should be trained for spill response operations.
- 6.2 Environmental precautions: All work practices must be aimed at eliminating environmental contamination.
- **6.3 Methods and material for containment and cleaning up:** Evacuate area. Contain spill if safe to do so. Prevent entry into drains, sewers, and other waterways. Soak up spilled material with an absorbent material and pick up and place in an appropriate waste container for disposal. Do not mix with other wastes. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

7 Handling and storage

7.1 Precautions for safe handling

As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing dust/vapors generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately. Wear full NIOSH/MISHA approved self contained breathing apparatus and full protective gear.

7.2 Conditions for safe storage, including any incompatibilities

Keep separate from bases, alkalis, metals especially aluminum, bleach, fluorine Storage:

Requirements to be met by storerooms and receptacles:

Store between 45 and 125 F (10-50 C) and avoid contact with skin and eyes.. Good general housekeeping procedure should be followed. Do not eat drink or smoke while using the material. Emergency showers should be readily available keep poison center and or doctors telephone contact number near by at all times for emergency response.. Avoid contact with skin eyes. Do not handle material unless all appropriate safety equipment and clothing are worn see section 8. Use only with good ventilation and PPE. Keep container closed when not in use.

7.3 Specific end use(s): No information

According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Version: 1.1

Revision: 4/26/2022

Trade Name: CHEM-STONE[™] Reactive Stain (various colors)

Additional

8 Exposure controls/personal protection

information about design of technical facilities:

Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above. Use local exhaust ventilation to control airborne dust/vapor. Ensure eyewash/safety shower stations are available near areas where this product is used.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

CAS 7647-01-1 Hydrochloric Acid

PEL	5ppm / 7 mg/m³ (ceiling)
TLV	2ppm /3 gm/m ³ (ceiling)

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

Respiratory protection: Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

> protective boots

Protection of hands & feet: Use chemical resistant gloves to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138 or appropriate Standards of Canada.



Protective gloves,

Material of gloves:

The selection of suitable gloves does not only depend on the material, but also on the quality, and varies from manufacturer to manufacturer.

Penetration time of glove material:

The exact break through time has to be determined by the manufacturer of the protective gloves. DO NOT exceed the breakthrough time set by the Manufacturer.

Eye protection: full chemical face mask as appropriate to prevent eye contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian Standards.



Tightly sealed goggles Ӯ Full chemical face mask

Body Protection:

Use body protection appropriate to prevent contact (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

Exposure guidelines:

According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Version: 1.1	1
--------------	---

Revision: 4/26/2022

Trade Name: CHEM-STONE™ Reactive Stain (various colors) 9 Physical and chemical properties 9.1 Information on basic physical and chemical properties **General Information** Appearance: Form: liquid Color: various colors Odor: pungent acidic Odor threshold: N/A 1-2 pH-value: Change in condition N/A Melting point/Melting range: 212°F (100°C) **Boiling point/Boiling range:** None Flash point: No data available Flammability (solid, gaseous): N/A Auto/Self-ignition temperature: **Decomposition temperature:** No data available Self-igniting: No data available Danger of explosion: This product could react and produce hydrogen gas **Explosion limits** Lower + Upper: Not established 170 mm Hg (227 hPa) Vapor pressure at: Density at 20°C: specific gravity 1.12-1.34 170mm Hg (227 hPa) Vapor pressure: Vapor density: <1 (Air=1) **Evaporation rate:** No data available Solubility in / Miscibility with Water: Soluble Specific Gravity 23 C: (Water = 1): 1.12 - 1.34 Viscosity: No data available Dynamic: No data available Kinematic: Solvent content: No data available Organic solvents: 0.0 g/l VOC (EC) No data available 9.2 Other information

According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Version: 1.1

Revision: 4/26/2022

Trade Name: CHEM-STONE[™] Reactive Stain (various colors)

10 Stability and reactivity

10.1 Reactivity: see 10.5

10.2 Chemical stability: Product is stable if used according to specifications

Thermal decomposition / conditions to be avoided: none known

- **10.3 Possibility of hazardous reactions:** if a reaction occurs there is the possibility of forming hydrogen gas
- **10.4 Conditions to avoid:** keep from entering waterways
- **10.5 Incompatible materials:** bases, amines, alkali metals, metals, especially aluminum, permanganates, fluorine, metal acetylides, hexalithium disilicide, bleach.

10.6 Hazardous decomposition products: no Dangerous decomposition products known

11 Toxicological information

11.1 Information on toxicological effects: Toxicity data is available for this product

Acute toxicity:

Primary irritant effect:

On the Skin : May be harmful if absorbed thru skin. Causes skin BURNS.

On the Eyes: Causes severe eye burns

Sensitization: none known

Additional toxicological information:

None of the ingredients are found on the following lists: FEDERAL OSHA Z LIST, NTP, CAL/OSHA, IARC **Reproductive toxicity information:**

No information available

Carcinogenicity: IARC, ACGIH, NTP, OSHA: no component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

12 Ecological information

12.1 Toxicity

Aquatic toxicity:

No further relevant info available

12.2 Persistence and degradability: No data available

12.3 Bio accumulative potential:

N/A.

12.4 Mobility in soil: No data available

General notes: No specific data is available for this product, 12.5 Results of PBT and vPvB assessment

PBT.vPvB assessment not available, chemical assessment not required /not conducted

General Notes: Do not allow undiluted product or large quantities of it to reach ground water, water course or sewerage system. Must not reach bodies of water or drainage ditch undiluted or un-neutralized

Trade Name: CHEM-STONE[™] Reactive Stain (various colors)

According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Version: 1.1

Revision: 4/26/2022

13 Disposal considerations 13.1 Waste treatment methods **Recommendations:** Waste disposal must be in accordance with appropriate Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan. Recommended to contact local licensed professional waste disposal service. RCRA WASTE CODE: None Listed EU WASTE CODE: Not Listed Cleansing agent: Water with cleaning agents **14 Transport information** 14.1 UN-Number DOT: IMDG: ADR, , IATA, TDG: **UN1789** ADR: RID 14.2 UN proper shipping name DOT, IMDG, IATA:TDG Hydrochloric Acid **RID/ADR** 1789 / Hydrochloric Acid 14.3 Transport hazard class(es) 8 DOT;; IMDG; IATA: ICAO Class: Label: ADR: RID 8 Item 5(B) Class: Label: 14.4 Packing group Ш DOT, ADR, IMDG, IATA:TDG: RID 14.5 Environmental hazards: Marine pollutant: No Warning corrosive substances 14.6 Special precautions for user Danger code (Kemler): 80/1789 **EMS Number:** F-A.S-B Acids Segregation group: 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the No data available IBC Code: Transport/Additional information ADR Limited quantities (LQ) 5L Excepted quantities (EQ) Code E1 Maximum net quantity per inner packaging 30 ml

According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Version: 1.1

Revision: 4/26/2022

Frade Name: CHEM-STONE™ Reactive Stain (various colors)		
Transport category: Tunnel restriction code:	Maximum net quantity per outer packaging 1000 ml 3 E	
UN "Model Regulation":	UN 1789 Corrosive, Hydrochloric Acid	

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture. United States (USA)

SARA: This product is not subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act.: None

Section 355 (extremely hazardous substances): Hydrochloric Acid CAS # 7647-01-0 Chromium Compounds CAS# 7440-47-3

Section 313 (Toxic Release Inventory): Hydrochloric Acid CAS # 7647-01-0 Chromium Compounds CAS# 7440-47-3

TSCA (Toxic Substances Control Act): All ingredients are listed

Proposition 65 (California):

Chemicals known to cause cancer:

This product contains some chemicals known to the state of California to cause cancer and birth defects or other reproductive harm. Some colors contain chromium (VI)

Massachusetts Right to Know Components

Hydrochloric Acid CAS # 7647-01-0 Chromium Compounds CAS# 7440-47-3

Pennsylvania Right to Know Components

Water CAS# 7732-18-5 Hydrochloric Acid CAS # 7647-01-0 Chromium Compounds CAS# 7440-47-3

New Jersey Right to Know Components

Water CAS# 7732-18-5 Hydrochloric Acid CAS # 7647-01-0 Chromium Compounds CAS# 7440-47-3

Canada

Canadian Domestic Substances List (DSL): All ingredients are listed

Canadian Ingredient Disclosure list (limit 0.1%): None of the ingredients are listed.

Canadian Ingredient Disclosure list (limit 1%): None of the ingredients are listed.

According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Version: 1.1

Revision: 4/26/2022

16 Other inform	lation
Relevant phrases	3:
Acute Tox.	Acute Toxicity
Aquatic Acute.	Acute aquatic toxicity
H302: Harmfu	l if swallowed
H312: Harmfu	l in contact with skin
H332: Harmfu	l in contact with skin
H315: causes	skin irritation
Precautionary	
P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P260	Do not breath dust/fumes/gas/mist/vapors/spray
P264	Wash skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P280	Wear protective gloves, /clothing protection, eye protection, face mask prote and foot Protection
P301+P330+P3	
P303+P361+P3	IF ON SKIN (or hair): Remove/Takeoff immediately all contaminated clothing Rinse skin with water (shower) THROUGHLY AND CONTINUOUSLY UNTIL ALL RESIDUE IS FLUSHED OFF BODY
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

R52/53: Harmful to aquatic organisms may cause long-term adverse effects in the aquatic environment.

Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation.

IATA: International Air Transport Association.

ACGIH: American Conference of Governmental Industrial Hygienists.

EINECS: European Inventory of Existing Commercial Chemical Substances.

ELINCS: European List of Notified Chemical Substances.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

NFPA: National Fire Protection Association (USA). HMIS: Hazardous Materials Identification System (USA).

LC50: Lethal concentration, 50 percent.

LD50: Lethal dose, 50 percent.