KRYSOL T1 K-210, KRYSOL T2 K-220
CONCRETE WATERPROOFING TREATMENT
SAFETY DATA SHEET
Oct 2015

1. IDENTIFICATION

Product Identifier:
- Krystol T1 Concrete Waterproofing Treatment
- Krystol T2 Concrete Waterproofing Treatment

Other Means of Identification: Krystol T1 (K-210), Krystol T2 (K-220)

Product Use: A concrete treatment that is applied to the surface of existing concrete structures.

Manufacturer’s details:
Kryton International Inc.
1645 E. Kent Avenue, Vancouver, BC, Canada, V5P 2S8
1-604-324-8280

Emergency Contacts & Phone Number:
Kryton International Inc. 1.800.267.8280 (Business Hours)
Call a poison center or doctor/physician in your country

BC, Canada: BC Drug and Poison Information Centre 604.682.5050
Australia: Poisons Information Centre 13 11 26
US: American Association of Poison Control Centers 1.800.222.1222

2. HAZARDS IDENTIFICATION

Classification of the Mixture

Classification
Skin Corrosion – Category 1C H314
Eye Damage – Category 1 H318
Skin Sensitization – Category 1 H317
Specific Target Organ Toxicity Single Exposure – Category 3 H335
Specific Target Organ Toxicity Repeated Exposure – Category 2 H373

Label Elements

Hazard Pictograms:

Signal Word: Danger

Hazard Statements:
H314 Causes severe skin burns and eye damage (alkaline when moistened)
H317 May cause an allergic skin reaction
H318 Causes serious eye damage
H335 May cause respiratory irritation
H373 May cause damage to respiratory organs through prolonged or repeated exposure.
Precautionary Statements

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust.
P264 Wash hands, forearms, and exposed areas thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves, protective clothing, face protection, eye protection.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353+P352 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.
P304+P340 IF INHALED: Remove person 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.
P321 Specific treatment (see Section 4).
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container according to local, regional, state, national, territorial, provincial, and international regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Mixture</th>
<th>Ingredient name</th>
<th>Product identifier</th>
<th>% (w/w)</th>
<th>GHS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Portland Cement</td>
<td>65997-15-1</td>
<td>15-40</td>
<td>Skin Irrit. 2: H315</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Eye Dam. 1: H318</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Skin Sens. 1: H317</td>
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<td></td>
<td></td>
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<td>STOT SE3: H335</td>
</tr>
<tr>
<td></td>
<td>Silica, Quartz</td>
<td>14808-60-7</td>
<td>15-40</td>
<td>STOT RE 2: H373</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Respirable: &lt;0.003)</td>
</tr>
</tbody>
</table>

As per paragraph (i) of §1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

4. FIRST AID MEASURES

Description of Necessary First Aid Measures
When contacting a physician, take this SDS with you.

Eyes:
- Do not rub eye(s) as additional cornea damage is possible by mechanical stress.
- Remove any contact lenses and open the eyelid(s) widely to flush eye(s) immediately by thoroughly rinsing with plenty of clean water for at least 15 minutes to remove all particles. If possible, use isotonic water (0.9% NaCl).
- Contact a specialist of occupational medicine or an eye specialist.

Skin:
- For dry product, remove and rinse abundantly with water.
- For wet product, wash skin with water.
- Remove contaminated clothing, footwear, watches, etc. and clean thoroughly before re-using them.
- Seek medical treatment in all cases of irritation or burns.

Ingestion:
- Do not induce vomiting.
- If person is conscious, wash out mouth with water and give plenty of water to drink.
- Get immediate medical attention or contact anti poison centre.

Inhalation:
- Remove to fresh air.
- If breathing has stopped, institute artificial respiration.
- Get medical attention if discomfort remains.
Most Important Symptoms and Effects, both Acute and Delayed
Eye Contact: Causes serious eye damage
Inhalation: May cause respiratory irritation
Skin Contact: May cause discomfort, irritation, and dermatitis. Exposure to wet product can cause serious burns.
Ingestion: May cause burns to mouth, throat and stomach

Immediate Medical Attention and Special Treatment
Obtain medical advice when large quantities have been inhale or ingested.

Effects of Acute and Chronic Exposure to Product: See Section 11.

5. FIREFIGHTING MEASURES

Extinguishing Media
Use an extinguishing agent suitable for the surrounding fire

Special Hazards Arising From the Substance or Mixture
No specific fire or explosion hazard. Non-combustible. Not flammable.

Special protective equipment for firefighters
Firefighters should wear self-contained breathing apparatus and full protective gear. Product reacts with water and creates heat.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures
Wear protective equipment as described under section 8 and follow the advice for safe handling and use given under section 7. Emergency procedures are not required.
Environment precautions: Do not wash product down sewage and drainage systems or into bodies of water.

Methods and Material for Containment and Cleaning Up
- Use dry cleanup methods that do not cause airborne dispersion, e.g.: Vacuum cleaner (Industrial portable units, equipped with high efficiency particulate filters (HEPA filter) or equivalent technique).
- Wipe-up the dust by mopping, wet brushing or water spraying and remove wet product.
- When vacuum cleaning or wet cleaning are not possible and only dry cleaning with brushes can be done, ensure that the workers wear appropriate personal protective equipment and prevent dust from spreading.
- Place spilled materials into a container. Allow material to dry and solidify before disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling
- Avoid contact with skin and eyes by wearing protective equipment: safety goggles, protective clothing, nitrile gloves and waterproof shoes.
- Use in well-ventilated area or wear NIOSH-approved respirator with particulate cartridges or filter.
- Do not handle or store near food and beverages or smoking materials.
- Carrying bags/buckets may cause sprains and strains to the back, arms, shoulders and legs.
- Handle with care and use appropriate control measures.
- Wash hands thoroughly with soap and water after handling.
- Keep container closed when not in use.

Conditions for Safe Storage, Including Any Incompatibilities
- Bulk product should be stored in containers that are waterproof, dry (internal condensation minimized), clean and protected from contamination.
- Product can build-up or adhere to the walls of a confined space. It can release, collapse or fall unexpectedly.
- Keep containers tightly closed.
- Protect from moisture.
- Store in a cool, dry place.
- Keep out of reach of children.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure Limits:
- Portland Cement, CAS# 65997-15-1
  WELs EH40/2005 (UK), 8 hr TWA, 2007 : 10 mg/m³ inhalable dust, 4 mg/m³ respirable dust.
  ACGIH TLV-TWA 2000: 10 mg total dust/m³
OSHA PEL, 8-hr TWA: 15 mg total dust/m³, 5 mg respirable dust/m³
Chromium VI (hexavalent): 0.05 mg/m³ - sensitizer
- Silica, Quartz, CAS#14808-60-7
- WELs EH40/2005 (UK), 8 hr TWA, 2007: 0.1 mg/m³ respirable dust
- ACGIH TLV-TWA 2008: 0.025 mg respirable dust/m³
- OSHA PEL, 8-hr TWA: 10 mg respirable dust/m³ (percent silica + 2)
- NIOSH REL, 8-hr TWA: 0.05 mg respirable dust/m³

**Appropriate Engineering Controls:** Use general or local exhaust ventilation to keep dust levels below exposure limits. If exceed the limits, use a properly fitted and NIOSH approved respirator.

**Individual protection measures:**
- Gloves: Chemical resistant rubber or nitrile gloves
- Respirator: NIOSH approved with particulates filter or cartridge
- Eye: Safety goggles or safety glasses with side shields
- Footwear: Waterproof
- Clothing: Long sleeve and long pants to avoid skin contact
- Other: Wash thoroughly with soap and water after handling

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Powder (Solid)
**Appearance:** Grey, mixture of finely divided and granules particulate.
**Odour:** Odourless
**Odour Threshold:** Not Applicable
**Specific Gravity:** 2.6 – 3.0
**Vapor Density:** Not Applicable
**Vapor Pressure:** Not Applicable
**Evaporation Rate:** Not Applicable
**Boiling Point:** Not Applicable
**Melting Point:** Not Applicable
**pH (in water):** 12-14 (Alkaline)
**Coefficient of Water/Oil Distribution:** Not Applicable
**Solubility in Water:** Slightly soluble (10-15%)
**Partition coefficient: n-octanol/water:** Not Applicable
**Relative bulk density:** 1.3 – 1.6
**Viscosity:** Not Applicable
**VOC content:** 0 g/L, EU (w/w) 0%
**Flammability:** Noncombustible
**Flashpoint:** Not Applicable
**Upper/Lower Flammability or Explosive Limits:** Not Applicable
**Auto-ignition Temperature:** Not Applicable
**Decomposition Temperature:** Not Applicable

### 10. STABILITY AND REACTIVITY

**Reactivity:** Wet product will react to form hydrated compounds, releasing heat and producing an alkaline solution until reaction is substantially complete.
**Chemical Stability:** Stable
**Conditions to Avoid (Stability):** Unintended contact with water or moisture, which produces caustic solutions, pH 12-14.
**Incompatible Materials:** React with acids, ammonium salts, fluorine, lithium and aluminum, which may liberate Carbon Monoxide, Carbon Dioxide or Hydrogen.
**Hazardous Polymerization:** Cannot occur
**Possibility of Hazardous Reactions:** No additional remark
**Hazardous Decomposition Products:** Will not spontaneously occur. Adding water produces caustic calcium hydroxide.
**Other Precautions:** When mix with water, the mixture is caustic with pH12-14 and it can get hot.
11. TOXICOLOGICAL INFORMATION

**Information on Toxicological Effects – Product**

**Acute Toxicity:** Portland Cement LD50/LC50 = Not Available  
Silica Quartz LD50 Oral Rat > 5000 mg/kg

**Routes of Entry:** Skin Contact, Eye Contact, Inhalation and Ingestion

**Effects of Acute Exposure to Product:**
- May cause eyes, skin and respiratory irritation, inflammation or severe chemical burns if direct contacted by large amount of product.
- May cause skin thickening, cracking or fissuring if contacted to wet product or dry product with wet skin.
- May cause coughing, sneezing and shortness of breath if exposed in excess of occupational exposure limits.

**Effects of Chronic Exposure to Product:**
- Multiple skin exposure over weeks or months leading to eczema or dermatitis. Content of sensitizing Cr(VI) is below 0.002% according to regulation.
- Exposure to crystalline silica may cause silicosis and series lung disease.
- Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation
- Sensitivity reactions may occur from prolonged and repeated exposure

**Irritancy of Product:** Can be irritating to eyes, skin, and respiratory tract.

**Skin Sensitization:** Can cause caustic burns and dermatitis when wet.

**Respiratory Sensitization:** Can cause chemical burn when wet. Respirable crystalline silica can cause silicosis and series lung disease.

**Numerical Measures of Toxicity:** Not Available

**Carcinogenicity:** No causal association between this product exposure and cancer has been established, but Silica, Quartz (CAS# 14808-60-7), one of the ingredients is listed as carcinogen by IARC and NTP. The respirable dust is lower than 0.003% in this product. It is lower than the GHS classification concentration limit (≥0.1%), so the product is not classified as carcinogen.
- Silica, Quartz (CAS# 14808-60-7)
- IARC Group 1 (Carcinogenic to humans)
- ACGIH Group A2 (Suspected human carcinogen)
- NTP Known carcinogen

**Reproductive Toxicity:** Not Available  
**Teratogenicity:** Not Available  
**Mutagenicity:** Not Available  
**Embryotoxicity:** Not Available

**Name of Synergistic Products/ Effects:** Not Available

12. ECOLOGICAL INFORMATION

**Ecotoxicity:**
- The product is not expected to be hazardous to the environment.
- The addition of large amounts to water may, however, cause a rise in pH and may therefore be toxic to aquatic life under certain circumstances.

**Mobility:** Dry product is not volatile but might become airborne during handling operations.

**Persistence and degradability/Bio accumulative potential/Results of PBT Assessment/Other adverse effects:** Not Available

13. DISPOSAL CONSIDERATIONS

Always dispose of in accordance with local, provincial (state), and federal regulations.

**Unused Residue or Dry Spillage:** Pick up dry material. Possibly reuse depending upon shelf life considerations and the requirement to avoid dust exposure. In case of disposal, harden with water and dispose according to local legislation.

**Slurries:** Allow to harden, avoid entry in sewage and drainage systems or into bodies of water and dispose according to 13.3.

**After Addition of Water and Hardened:**
- Dispose of according to local legislation. Avoid entry into the sewage water system.
- Dispose of the hardened product as concrete waste. Due to inertisation, concrete waste is not a dangerous waste.
• EWC entries: 10 13 14 (waste concrete or concrete sludge) or 17 01 01 (concrete).

**Packaging:**
• Completely empty the packaging and recycle / dispose in accordance with local legislation.
• EWC entry: 15 01 02 (plastic packaging).

### 14. TRANSPORT INFORMATION

**Special Shipping Information:** This product is not listed as a Hazardous Material under TDG, DOT, IMDG, IATA and ADR/RID. No special precautions are needed apart from those mentioned under Section 8.

**PIN:** Not Applicable

- **TDG (Canada):** Not regulated
- **DOT (U.S.):** Not regulated
- **ADR/RID:** Not regulated
- **IMDG:** Not regulated
- **IATA:** Not regulated
- **UN Number:** Not listed

### 15. REGULATORY INFORMATION

This product is classified as non-Dangerous Goods.

**WHMIS Classification:** D2A, toxic; E, Corrosive (when moistened)

**European Hazard Symbol:** C, Corrosive (when moistened); T, Toxic; Xi, Irritant

**Globally Harmonized System (GHS) Classification:**
- Acute Toxicity Category 4; Skin Corrosion/Irritation Category 1 (when moistened)
- **HMIS:** Health *2; Flammability 0; Physical Hazard 1.

**OSHA:** This product is considered a hazardous chemical. It is recommended to follow “Safety and Health Program Management Guidelines” by OSHA.

**TSCA:** This product is exempted from TSCA because it is defined as a mixture.

**SARA:** This product is considered a hazardous chemical and has a delayed health hazard under section 311 and 312 of the Emergency Planning and Community Right to Know Act (EPCRA) of 1986. This product does not contain any ingredients regulated under Section 313 of the EPCRA, 1986 or 40 CFR 372.

**U.S. State Regulations:**
- New Jersey - Workplace Hazard
- Pennsylvania - Workplace Hazard
- California - Proposition 65
- Massachusetts - Hazardous Substance

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

### 16. OTHER INFORMATION

**Abbreviations:**
- **ACGIH** American Conference of Governmental Industrial Hygienists
- **ADR/RID** Agreement on the Transport of Dangerous Goods by Road/ Regulations on the International Transport of Dangerous Goods by Rail
- **CAS#** Chemical Abstract Service number
- **CPR** Controlled Products Regulations
- **DOT** U.S. Department of Transportation
- **EINECS** European Inventory of Existing Commercial Chemical Substances
- **EPCRA** Emergency Planning and Community Right to Know Act
- **EWC** European Waste Catalogue
- **GHS** Globally Harmonized System
- **HMIS** Hazardous Materials Identification System
- **IARC** International Agency for Research on Cancer
- **IATA** International Air Transport Association
- **IMDG** International Maritime Dangerous Goods
- **LC50** Lethal Concentration
- **LD50** Lethal Dose
- **NIOSH** National Institute for Occupational Safety and Health
**Manufacture's notes**

- The information on this data sheet reflects the currently available knowledge and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product, including the use of the product in combination with any other product or any other process, is the responsibility of the user.
- It is implicit that the user is responsible for determining appropriate safety measures and for applying the legislation covering his own activities.