MATERIAL SAFETY DATA SHEET

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER
20.00131-

PRODUCT NAME
H&C® SHIELD PLUS ULTRA™ Acrylic Concrete Stain, Pearl Gray

MANUFACTURER'S NAME
H&C CONCRETE STAINS
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

<table>
<thead>
<tr>
<th>Regulatory Information</th>
<th>(216) 566-2902</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><a href="http://www.paintdocs.com">www.paintdocs.com</a></td>
</tr>
<tr>
<td>Medical Emergency</td>
<td>(216) 566-2917</td>
</tr>
<tr>
<td>Transportation Emergency</td>
<td>(800) 424-9300</td>
</tr>
</tbody>
</table>

*for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>% by Weight</th>
<th>CAS Number</th>
<th>Ingredient</th>
<th>Units</th>
<th>Vapor Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>29911-28-2</td>
<td>1-(2-Butoxymethylethoxy)-propanol</td>
<td>ACGIH TLV Not Available</td>
<td>0.06 mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>OSHA PEL</td>
<td>Not Available</td>
</tr>
<tr>
<td>2</td>
<td>107-21-1</td>
<td>Ethylene Glycol</td>
<td>ACGIH TLV 100 MG/M3 CEILING (aerosol)</td>
<td>0.12 mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>OSHA PEL 50 PPM CEILING</td>
<td></td>
</tr>
<tr>
<td>0.1</td>
<td>14464-46-1</td>
<td>Cristobalite</td>
<td>ACGIH TLV 0.025 mg/m3 as Resp. Dust</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>OSHA PEL 0.05 mg/m3 as Resp. Dust</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>13463-67-7</td>
<td>Titanium Dioxide</td>
<td>ACGIH TLV 10 mg/m3 as Dust</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>OSHA PEL 10 mg/m3 Total Dust</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>OSHA PEL 5 mg/m3 Respirable Fraction</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE
INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

EFFECTS OF OVEREXPOSURE
EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

In a confined area vapors in high concentration may cause headache, nausea or dizziness.
Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:
* the liver
* the urinary system

SIGNS AND SYMPTOMS OF OVEREXPOSURE
Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
None generally recognized.

CANCER INFORMATION
For complete discussion of toxicology data refer to Section 11.

HMIS Codes

<table>
<thead>
<tr>
<th></th>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
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</thead>
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<tr>
<td></td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

DATE OF PREPARATION
Feb 4, 2011
SECTION 4 — FIRST AID MEASURES

**EYES:** Flush eyes with large amounts of water for 15 minutes. Get medical attention.

**SKIN:** Wash affected area thoroughly with soap and water. Remove contaminated clothing and launder before re-use.

**INHALATION:** If affected, remove from exposure. Restore breathing. Keep warm and quiet.

**INGESTION:** Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

<table>
<thead>
<tr>
<th>FLASH POINT</th>
<th>LEL</th>
<th>UEL</th>
<th>FLAMMABILITY CLASSIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Applicable</td>
<td>N.A.</td>
<td>N.A.</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

**EXTINGUISHING MEDIA**
Carbon Dioxide, Dry Chemical, Alcohol Foam

**UNUSUAL FIRE AND EXPLOSION HAZARDS**
Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

**SPECIAL FIRE FIGHTING PROCEDURES**
Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**
Remove all sources of ignition. Ventilate the area. Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

**STORAGE CATEGORY**
Not Applicable

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE**
Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

**PRECAUTIONS TO BE TAKEN IN USE**
Use only with adequate ventilation. Avoid contact with skin and eyes. Avoid breathing vapor and spray mist. Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m³ (total dust), 3 mg/m³ (respirable fraction), OSHA PEL 15 mg/m³ (total dust), 5 mg/m³ (respirable fraction).

Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

**VENTILATION**
Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

**RESPIRATORY PROTECTION**
If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2. When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

**PROTECTIVE GLOVES**
Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

**EYE PROTECTION**
Wear safety spectacles with unperforated sideshields.
**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>PRODUCT WEIGHT</td>
<td>9.75 lb/gal 1168 g/l</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY</td>
<td>1.17</td>
</tr>
<tr>
<td>BOILING POINT</td>
<td>212 - 449 °F 100 - 231 °C</td>
</tr>
<tr>
<td>MELTING POINT</td>
<td>Not Available</td>
</tr>
<tr>
<td>VOLATILE VOLUME</td>
<td>69%</td>
</tr>
<tr>
<td>EVAPORATION RATE</td>
<td>Slower than ether</td>
</tr>
<tr>
<td>VAPOUR DENSITY</td>
<td>Heavier than air</td>
</tr>
<tr>
<td>SOLUBILITY IN WATER</td>
<td>N.A.</td>
</tr>
<tr>
<td>VOLATILE ORGANIC COMPOUNDS</td>
<td>1.64 lb/gal 197 g/l Less Water and Federally Exempt Solvents</td>
</tr>
<tr>
<td>pH</td>
<td>9.0</td>
</tr>
</tbody>
</table>

**SECTION 10 — STABILITY AND REACTIVITY**

STABILITY — Stable

CONDITIONS TO AVOID
None known.

INCOMPATIBILITY
None known.

HAZARDOUS DECOMPOSITION PRODUCTS
By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION
Will not occur

**SECTION 11 — TOXICOLOGICAL INFORMATION**

CHRONIC HEALTH HAZARDS
Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer. IARC’s Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, “No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint.”

Ethylene Glycol is considered an animal teratogen. It has been shown to cause birth defects in rats and mice at high doses when given in drinking water or by gavage. There is no evidence to indicate it causes birth defects in humans.

**TOXICOLOGY DATA**

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient Name</th>
<th>LC50 RAT</th>
<th>LD50 RAT</th>
<th>LC50 RAT</th>
<th>LD50 RAT</th>
<th>LC50 RAT</th>
<th>LD50 RAT</th>
</tr>
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<tbody>
<tr>
<td>29911-28-2</td>
<td>1-(2-Butoxymethylethoxy)-propanol</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td></td>
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</tr>
<tr>
<td>107-21-1</td>
<td>Ethylene Glycol</td>
<td>4700 mg/kg</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
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<tr>
<td>14464-46-1</td>
<td>Cristobalite</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13463-67-7</td>
<td>Titanium Dioxide</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 12 — ECOLOGICAL INFORMATION**

ECOTOXICOLOGICAL INFORMATION
No data available.

**SECTION 13 — DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL METHOD
Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.
SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)
Not Regulated for Transportation.

Canada (TDG)
Not Regulated for Transportation.

IMO
Not Regulated for Transportation.

IATA/ICAO
Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>CHEMICAL/COMPOUND</th>
<th>% by WT</th>
<th>% Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>107-21-1</td>
<td>Ethylene Glycol</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

CALIFORNIA PROPOSITION 65
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION
All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

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

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.