PART I  What is the material and what do I need to know in an emergency?

1 – IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

IDENTIFICATION of the SUBSTANCE or PREPARATION:
TRADE NAME (AS LABELED):
DeWALT CHALKS
SYNONYMS:
DeWALT Black Chalk; DeWALT Blue Chalk; DeWALT Red Chalk; DeWALT White Chalk
CHEMICAL NAME/CLASS:
Calcium Carbonate/Pigment/Silica Mixtures
RELEVANT USES of the MIXTURE:
Chalks
USES ADVISED AGAINST:
Other than Relevant Use
SUPPLIER OF THE SAFETY DATA SHEET:
U.S. MANUFACTURER’S NAME:
STANLEY WORKS
ADDRESS:
480 Myrtle Street
New Britain, CT 06053
BUSINESS PHONE:
1-800-262-2161
EUROPEAN SUPPLIER/IMPORTER’S NAME:
ADDRESS:
EMERGENCY PHONE:
CHEMTREC: 1-800-424-9300 (U.S., Canada, Puerto Rico, U.S. Virgin Islands)
+1-703-527-3887 (outside areas above, call collect)
DATE OF PREPARATION:
December 11, 2007
DATE OF REVISION:
July 18, 2013
ALL WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2010 format. This material has been classified in accordance with the hazard criteria of the CPR and the SDS contains all the information required by the CPR. The material is also classified per all applicable EU Directives through EC 1907: 2006, the European Union CLP EC 1272/2008 and the Global Harmonization Standard.

2. HAZARD IDENTIFICATION

Classification:  Carcinogenic Cat. 2
Signal Word:  Warning
Precautionary Statement Codes: P201, P202, P280, P308 + P313, P405, P501
Hazard Symbol/Pictogram: GHS08

Classification:  Carcinogenic Cat. 3
Risk Phrase Codes: R45; For Blue Chalk Only: R32
Safety Phrase Codes: S(1/2), S22, S25, S36/37/39, S38, S45, S53
Hazard Symbol: Xn

See Section 16 for full text of Classification

EMERGENCY OVERVIEW:  Product Description:  These products are colored, finely powdered, odorless chalks. Health Hazards:  Inhalation of dusts from this product may irritate the respiratory system. Skin and eye contact may cause mechanical abrasion. These chalks contain Crystalline Silica, a known human carcinogen by inhalation. Flammability Hazards:  These chalks are not flammable. Finely divided dusts from these products can form explosive mixtures in air. If involved in a fire, these products may decompose to form iron oxides, aluminum oxides, silicon dioxide, sulfur dioxide, magnesium oxides, carbonate oxides and calcium oxides. Reactivity Hazards:  These chalks are not normally reactive. For the Blue Chalk, contact with acids can release toxic hydrogen sulfide. Environmental Hazards:  These products are not expected to pose significant harm to the environment, however all release to the environment should be avoided. Emergency Recommendations:  Emergency responders must wear the personal protective equipment suitable for the situation to which they are responding.

3. COMPOSITION and INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS #</th>
<th>EINECS #</th>
<th>% w/w</th>
<th>LABEL ELEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limestone/Calcium Carbonate (CaCO₃)</td>
<td>1317-65-3</td>
<td>215-279-6</td>
<td>70-100%</td>
<td>EU 67/548: Classification: Not applicable. GHS &amp; EU 1272/2008: Classification: Not applicable.</td>
</tr>
</tbody>
</table>

See Section 16 for full text of Classification
3. COMPOSITION and INFORMATION ON INGREDIENTS (Continued)

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS #</th>
<th>EINECS #</th>
<th>% w/w</th>
<th>LABEL ELEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline Silica</td>
<td>14808-60-7</td>
<td>238-878-4</td>
<td>0.1-1.5%</td>
<td>SELF-CLASSIFICATION</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EU 67/548: Classification: Carcinogenic Cat. 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Risk Phrase Codes: R45</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>GHS and EU 1272/2008: Classification: Carcinogenic Cat. 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Hazard Codes: H351</td>
</tr>
</tbody>
</table>

The following are pigments in each of the chalks:

- **Blue Chalk**: Sodium Alumino Sulphosilicate/C.I. Pigment Blue 29 57455-37-5 Unlisted 20-30% SELF-CLASSIFICATION EU 67/548: Classification: None GHS and EU 1272/2008: Classification: None Supplemental Hazard Codes: EUH032

- **Red Chalk**: Hematite/Iron Oxide (Fe₂O₃) 1317-60-8 215-275-4 20-30% EU 67/548: Classification: Not applicable. GHS & EU 1272/2008: Classification: Not applicable.


- **White Chalk**: Magnesium Carbonate (MgCO₃) 546-93-0 208-915-6 0-2% EU 67/548: Classification: Not applicable. GHS & EU 1272/2008: Classification: Not applicable.

See Section 16 for full text of Classification.

PART II  What should I do if a hazardous situation occurs?

4. FIRST-AID MEASURES

**DESCRIPTION OF FIRST AID MEASURES**: Contaminated individuals must be taken for medical attention if any adverse effects occur. Remove contaminated clothing and shoes. Take a copy of this SDS to health professional with victim. Wash clothing and thoroughly clean shoes before reuse.

- **SKIN EXPOSURE**: If skin contact with this material occurs, flush affected area with water. Minimum flushing is for 20 minutes. The contaminated individual must seek medical attention if any adverse effects occur after flushing.

- **EYE EXPOSURE**: If this material enters the eyes, open contaminated individual's eyes while under gently running water. Use sufficient force to open eyelids. Have contaminated individual "roll" eyes. Minimum flushing is for 20 minutes. Contaminated individual must seek medical attention if adverse effect occurs or continues after flushing.

- **INHALATION**: If dusts of this material are inhaled, remove victim to fresh air. The contaminated individual must seek medical attention if any adverse effects occur.

- **INGESTION**: If this material is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, seek immediate medical attention. If alert, victim should drink up to three glasses of water. Do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow. If victim is convulsing, maintain an open airway and obtain emergency medical attention.

- **IMPORTANT SYMPTOMS AND EFFECTS**: See Sections 2 (Hazard Identification) and 11 (Toxicological Information).

- **MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE**: Preexisting respiratory problems, dermatitis, and other skin disorders may be aggravated by exposure to this product.

- **INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT IF NEEDED**: Treat symptoms and eliminate exposure.

5. FIRE-FIGHTING MEASURES

- **FLASH POINT**: Not applicable.

- **AUTOIGNITION TEMPERATURE**: Not applicable.

- **FLAMMABLE LIMITS (in air by volume, %)**: Not applicable.

- **FIRE EXTINGUISHING MEDIA**: Unless incompatibilities exist for surrounding materials, carbon dioxide, water spray, ‘ABC’ type chemical extinguishers, foam, dry chemical and halon extinguishers can be used to fight fires involving this material.

- **UNSUITABLE FIRE EXTINGUISHING MEDIA**: None known.

- **SPECIAL HAZARDS ARISING FROM THE SUBSTANCE**: Finely divided dusts from these products can form explosive mixtures in air. If involved in a fire, these products may decompose to form iron oxides, aluminum oxides, silicon dioxide, sulfur dioxide, magnesium, carbon and calcium oxides.

  - **Explosion Sensitivity to Mechanical Impact**: Not sensitive.
  - **Explosion Sensitivity to Static Discharge**: Finely divided dusts from this material pose a hazard of an air/dust explosion in presence of an ignition source.

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DeWALT CHALKS SDS

PAGE 2 OF 11
5. FIRE-FIGHTING MEASURES (Continued)

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: It is suggested that kits include a respirator, chemical splash goggles, two pairs of gloves, two sheets (12” x 12”) of absorbent material, 250-mL and 1-liter spill control pillows, a small scoop to collect glass fragments (if applicable) and two large waste disposal bags. Absorbents should be able to be incinerated. Avoid generating airborne dusts of this material during spill response procedures as described below.

PROTECTIVE EQUIPMENT:

- **Small Spills/Spills in Hoods:** Personnel wearing nitrile or other appropriate gloves, labcoat or other protective clothing and eye protection should immediately clean incidental spills of less than 5 g.
- **Large Spills:** Use proper protective equipment, including double nitrile or appropriate gloves, and protective clothing (e.g., disposable Tyvek coveralls). When there is any danger of airborne dusts being generated, use a full-face respirator equipped with a High Efficiency Particulate (HEPA) filter. Self-Contained Breathing Apparatus (SCBA) can be used instead of an air-purifying respirator.

METHODS FOR CLEAN-UP AND CONTAINMENT:

- **Cleanup of Small Spills:** Solids should be gently covered with wet absorbent pads. Clean spill with pad and dispose of properly. Decontaminate the spill area (three times) using a bleach and detergent solution and then rinse with clean water.
- **Large Spills:** Restrict access to the spill areas. For spills of greater than 5 g, be sure not to generate dusts by gently covering with damp absorbent sheets, spill-control pads, pillows, cloths, or towels. The dispersion of particles into surrounding air and the possibility of inhalation is a serious matter and should be treated as such. Do not apply chemical in-activators as they may produce hazardous by-products. Sweep up or vacuum spilled solid (an explosion-proof vacuum should be used), avoiding the generation of airborne dusts. Decontaminate the area thoroughly.

All Spills: Use procedures described above and then place all spill residues in an appropriate, labeled container and seal. Move to a secure area. Dispose of in accordance with Federal, State, and local hazardous waste disposal regulations (see Section 13, Disposal Considerations). For spills on water, contain, minimize dispersion and collect. Dispose of recovered material and report spill per regulatory requirements.

ENVIRONMENTAL PRECAUTIONS: Prevent material from entering sewer or confined spaces, waterways, soil or public waters. Do not flush to sewer. For spills on water, contain, minimize dispersion and collect.

REFERENCE TO OTHER SECTIONS: Review Sections 2, 8, 11, & 12 before proceeding with cleanup. See Section 13, Disposal Considerations for more information.

PART III  How can I prevent hazardous situations from occurring?

7. HANDLING and STORAGE

PRECAUTIONS FOR SAFE HANDLING: All employees who handle this material should be trained to handle it safely. Open containers slowly on a stable surface. 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 airborne dusts generated by this product. Use in a well-ventilated location. Ensure this product is used with adequate ventilation and personal protective equipment (see Section 8, Exposure Controls and Personal Protection). Avoid airborne dusts generated by this product. Clean work areas routinely to prevent accumulation of dust. Clean up spills promptly.

CONDITIONS FOR SAFE STORAGE: Empty containers may contain residual amounts of this product; therefore, empty containers should be handled with care. Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Store away from incompatible materials (see Section 10, Stability and Reactivity). Have appropriate extinguishing equipment in the storage area (e.g., sprinkler system, portable fire extinguishers). Keep container tightly closed when not in use. Refer to NFPA 654, Prevention of Fire and Dust Explosions from the Manufacturing, Processing and Handling of Combustible Particulate Solids for additional information on storage.

SPECIFIC END USE(S): These products are used in chalk line devices in construction. Follow all industry standards for use of this product.

PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT: Follow practices indicated in Section 6 (Accidental Release Measures). Make certain that application equipment is locked and tagged-out safely. Always use this product in areas where adequate ventilation is provided. Decontaminate equipment thoroughly, before maintenance begins. Collect all rinsates and dispose of according to applicable or applicable federal, state, provincial and local standards.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE LIMITS/CONTROL PARAMETERS:

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided in this Section if applicable. Ensure eyewash/safety shower stations are available near areas where this product is used.
### 8. EXPOSURE CONTROLS - PERSONAL PROTECTION (Continued)

#### EXPOSURE LIMITS/CONTROL PARAMETERS (continued):

### WORKPLACE EXPOSURE LIMITS/CONTROL PARAMETERS (continued):

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>EXPOSURE LIMITS IN AIR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ACGIH-TLVs</td>
</tr>
<tr>
<td></td>
<td>TWA mg/m³</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>1317-65-3</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>1333-96-4</td>
</tr>
<tr>
<td>C.I. Pigment Blue 29</td>
<td>57455-37-5</td>
</tr>
<tr>
<td>Crystalline Silica</td>
<td>14808-60-7</td>
</tr>
<tr>
<td>Iron Oxide/Hematite Exposure limits given for are for Iron oxide CAS # 1309-37-1</td>
<td>1317-60-8</td>
</tr>
<tr>
<td>Magnesium Carbonate Exposure limits given are for talc, containing no asbestos fibers, CAS # 14807-96-6</td>
<td>546-93-0</td>
</tr>
</tbody>
</table>

### INTERNATIONAL OCCUPATIONAL EXPOSURE LIMITS:

Currently, the following additional international exposure limits are established for some components of this product:

#### CALCIUM CARBONATE:
- Belgium: TWA = 10 mg/m³, MAR 2002
- Hungary: TWA = 10 mg/m³, SEP 2000
- Japan: OEL = 2 mg/m³ (resp. dust), 84 mg/m³ (total dust), MAY 2009
- Korea: TWA = 10 mg/m³, 2006
- Mexico: TWA = 10 mg/m³; STEL 20 mg/m³ (inhalable), 2004
- The Netherlands: MAC-TGG = 10 mg/m³, 2003
- New Zealand: TWA = 10 mg/m³ (inspirable dust), JAN 2002
- Poland: MAC(TWA) dust = 10 mg/m³, JAN 1999
- Russia: STEL = 6 mg/m³, JUN 2003
- Switzerland: MAK-W = 3 mg/m³, DEC 2006
- United Kingdom: TWA = 10 mg/m³ (inhalant dust), OCT 2007
- United Kingdom: TWA = 4 mg/m³ (respirable dust), OCT 2007
- In Argentina, Bulgaria, Columbia, Jordan, Singapore, Vietnam check ACGIH TLV

#### IRON OXIDE/MAGNETITE:
- Australia: TWA = 2.5 mg/m³, JUL 2008
- Belgium: TWA = 10 mg/m³, MAR 2002
- France: VME = 10 mg/m³, FEB 2006
- Korea: TWA = 10 mg/m³, 2006
- Mexico: TWA = 10 mg/m³; STEL = 20 mg/m³ (inhalable), 2004
- The Netherlands: MAC-TGG = 10 mg/m³, 2003
- New Zealand: TWA = 10 mg/m³ (inspirable dust), MAY 2011
- United Kingdom: TWA = 4 mg/m³ (respirable dust), OCT 2007
- In Argentina, Bulgaria, Columbia, Jordan, Singapore, Vietnam check ACGIH TLV

#### MAGNESIUM CARBONATE (TALC):
- Australia: TWA = 2.5 mg/m³, JUL 2008
- Belgium: TWA = 10 mg/m³, MAR 2002
- France: VME = 10 mg/m³, FEB 2006
- Korea: TWA = 10 mg/m³, 2006
- Mexico: TWA = 10 mg/m³; STEL = 20 mg/m³ (inhalable), 2004
- The Netherlands: MAC-TGG = 10 mg/m³, 2003
- New Zealand: TWA = 10 mg/m³ (inspirable dust), MAY 2011
- United Kingdom: TWA = 4 mg/m³ (respirable dust), OCT 2007
- In Argentina, Bulgaria, Columbia, Jordan, Singapore, Vietnam check ACGIH TLV

8. EXPOSURE CONTROLS - PERSONAL PROTECTION (Continued)

PROTECTIVE EQUIPMENT (continued):

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below exposure limits listed above. For materials without listed exposure limits, minimize respiratory exposure. If necessary, use only respiratory protection authorized under appropriate regulations. Oxygen levels below 19.5% are considered IDLH by U.S. OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under U.S. OSHA's Respiratory Protection Standard (1910.134-1998). The following are NIOSH Respiratory Protection Equipment Guidelines for some components of these products:

**CARBON BLACK**

**CONCENTRATION** | **RESPIRATORY PROTECTION**
---|---
Up to 17.5 mg/m³: Any Dust and Mist Respirator.
Up to 35 mg/m³: Any Dust and Mist Respirator except single-use and quarter-mask respirators, or any Supplied-Air Respirator (SAR).
Up to 87.5 mg/m³: Any SAR operated in a continuous-flow mode, or any Powered, Air-Purifying Respirator (PAPR) with a dust and mist filter.
Up to 175 mg/m³: Any Air-Purifying, Full-Facepiece Respirator with a high-efficiency particulate filter, or any PAPR with a tight-fitting facepiece and a high-efficiency particulate filter, or any Self-Contained Breathing Apparatus (SCBA) with a full facepiece, or any SAR with a full facepiece.
Up to 1750 mg/m³: Any SAR operated in a pressure-demand or other positive-pressure mode.
Emergency or Planned Entry into Unknown Concentrations or IDLH Conditions: Any SCBA that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode, or any SAR that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary SCBA operated in pressure-demand or other positive-pressure mode.
Escape: Any Air-Purifying, Full-Facepiece Respirator with a high-efficiency particulate filter, or any appropriate escape-type, SCBA.

In Presence of Polycyclicaromatic Hydrocarbons:
Based on NIOSH REL at Concentrations Above the NIOSH REL, or Where There is No REL, at Any Detectable Concentration: Any SCBA that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode, or any SAR that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary SCBA operated in pressure-demand or other positive-pressure mode.
Escape: Any Air-Purifying, Full-Facepiece Respirator with a high-efficiency particulate filter, or any appropriate escape-type, SCBA.

**CRYSTALLINE SILICA**

**CONCENTRATION** | **RESPIRATORY PROTECTION**
---|---
Up to 0.5 mg/m³: Any Air-Purifying Respirator with a high-efficiency particulate filter.
Up to 1.25 mg/m³: Any Powered, Air-Purifying Respirator (PAPR) with a high-efficiency particulate filter, or any Supplied-Air Respirator (SAR) operated in a continuous-flow mode.
Up to 2.5 mg/m³: Any Air-Purifying, Full-Facepiece Respirator with a high-efficiency particulate filter, or any PAPR with a tight-fitting facepiece and a high-efficiency particulate filter.
Up to 25 mg/m³: Any SAR operated in a pressure-demand or other positive-pressure mode.
Emergency or Planned Entry into Unknown Concentrations or IDLH Conditions: Any SCBA that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode, or any SAR that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary SCBA operated in pressure-demand or other positive-pressure mode.
Escape: Any Air-Purifying, Full-Facepiece Respirator with a high-efficiency particulate filter, or any appropriate escape-type, SCBA.

**EYE PROTECTION:** Wear safety goggles/glasses as appropriate for the task if dust or other particulates are present. Face shields are recommended if solutions are made. If necessary, refer to appropriate regulations.

**HAND PROTECTION:** Wash hands and wrists before putting on and after removing gloves. None needed under normal conditions of use and handling. Wear appropriate glove for work being done. Resistance of specific materials can vary from product to product. Evaluate resistance under conditions of use and maintain gloves carefully. Because all gloves are to some extent permeable and their permeability increases with time, they should be changed regularly or immediately if torn or punctured. Use triple gloves for spill response, as stated in Section 6 (Accidental Release Measures) of this SDS. If necessary refer to appropriate regulations.

**SKIN PROTECTION:** Use appropriate protective clothing for the task. Full-body chemical protective clothing is recommended for emergency response procedures. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in appropriate regulations. If necessary, refer to the U.S. OSHA Technical Manual (Section VII: Personal Protective Equipment) or other appropriate regulations.

9. PHYSICAL and CHEMICAL PROPERTIES

**FORM:** Finely divided, powdered solids

**COLOR:** Black, red, white or blue.

**ODOR:** Odorless.

**ODOR THRESHOLD:** Not applicable.

**MOLECULAR FORMULA:** Mixture.

**MOLECULAR WEIGHT:** Mixture.

**RELATIVE VAPOR DENSITY (air = 1):** Not established.

**EVAPORATION RATE (n-BuAc = 1):** Not established.

**RELATIVE MELTING/FREEZING POINT:** Not established.

**BOILING POINT:** Not established.

**VAPOR PRESSURE:** Not established.

**pH:** Not available.

**FLAMMABILITY:** Dusts may present ignition hazard.

**DECOMPOSITION TEMPERATURE:** 120°C (248°F)

**SPECIFIC GRAVITY (water = 1):** Black Chalk: 2.49-2.52; Blue Chalk: 2.60-2.62; Red Chalk: 3.1-3.3; White Chalk: 2.71

**SOLUBILITY IN ORGANIC SOLVENTS:** Not known.

**SOLUBILITY IN WATER:** Black and Blue Chalks: Insoluble. Red Chalk: 0.1%; White Chalk: Insoluble.

**HOW TO DETECT THIS SUBSTANCE IN EVENT OF ACCIDENTAL SPILL (warning properties):** The color of these products may be a method to identify them in event of an accidental spill.

10. STABILITY and REACTIVITY

**CHEMICAL STABILITY:** Normally stable.

**DECOMPOSITION PRODUCTS:** 
- **Combustion:** Thermal decomposition of this product can produce iron oxides, aluminum oxides, silicon dioxide, sulfur dioxide, magnesium, carbon and calcium oxides. The Blue Chalk may release hydrogen sulfide in contact with acids.
- **Hydrolysis:** None known.
**10. STABILITY and REACTIVITY (Continued)**

**MATERIALS WITH WHICH PRODUCT IS INCOMPATIBLE:** Calcium carbonate ignites on contact with fluorine. It is incompatible with acids, aluminum, and ammonium salts and mercury/hydrogen mixtures. Due to other components, these products may also be incompatible with formaldehyde, strong oxidizing agents, hydrofluoric acid, manganese trifluoride, sodium, and xenon hexafluoride.

**POSSIBILITY OF HAZARDOUS REACTIONS/POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID:** Avoid exposure to or contact with light, extreme temperatures, and incompatible chemicals.

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**11. TOXICOLOGICAL INFORMATION**

**SYMPTOMS OF EXPOSURE BY ROUTE OF EXPOSURE:** The most significant routes of industrial exposure to this product are by skin or eye contact and inhalation.

**INHALATION:** If dusts or particulates from these products are inhaled, irritation of the nose, throat, and lungs can occur. Symptoms may include sneezing, coughing, nasal congestion, and difficulty breathing. Symptoms are generally alleviated upon exposure to fresh air. If heated, chronic exposure to concentrations of silicon dioxide fume may cause chronic obstructive lung disease. Inhalation of iron oxide fume or dust is cause of pulmonary roentgenographic appearance called siderosis, or an accumulation of iron that leads to reduced lung capacity. These products contain Crystalline Silica, which is a known human carcinogen. Chronic inhalation exposure to this material may cause silicosis, pulmonary fibrosis, bronchitis or present a hazard of cancer, due to the presence of Crystalline Silica.

**CONTACT WITH SKIN or EYES:** Skin contact may cause abrasion, redness, and discomfort. Prolonged or repeated skin exposure may cause dermatitis (dry, red skin). Direct eye contact with these products may cause stinging, tearing, and redness. Dust can cause mechanical irritation to the eye. Repeated contact of iron dusts with the eyes can cause conjunctivitis, or can cause discoloration of the eyes.

**SKIN ABSORPTION:** This product does not pose a hazard of skin absorption.

**INGESTION:** Ingestion is an unlikely route of occupational exposure to this product. In the unlikely event that dusts from the product are ingested nausea, vomiting, and diarrhea may result. Repeated ingestion of iron compounds can cause vomiting, diarrhea, pink urine, black stool, and liver or kidney damage. Repeated ingestion of iron compounds can also cause siderosis, which is an accumulation of iron in tissues.

**INJECTION:** These products do not pose a hazard of injection.

**HEALTH EFFECTS OR RISKS FROM EXPOSURE:** An Explanation in Lay Terms. In the event of exposure, the following symptoms may be observed:

- **Acute:** Acute exposure to the skin and eyes can cause mechanical irritation.
- **Inhalation:** Inhalation of dusts can cause pulmonary irritation.
- **Chronic:** Repeated inhalation exposure may cause adverse effects to the respiratory system. Chronic inhalation may result in pulmonary fibrosis. This product contains crystalline silica, which is a known human carcinogen.

**HEALTH EFFECTS OR RISKS FROM EXPOSURE (continued):**

**TARGET ORGANS:** Acute: Skin, eyes, respiratory system. Chronic: Skin, respiratory system.

**TOXICITY DATA:** Currently, toxicity data are available for the following components of these products:

**LIMESTONE/CALCIUM CARBONATE:**

- TCLo (Inhalation-Rat) 84 mg/m³/4 hours/40 weeks-intermittent: Lungs, Thorax, or Respiration: fibrosis (interstitial); Liver: other changes Kidney/Urinary/Bladder: other changes
- TCLo (Inhalation-Rat) 250 mg/m³/2 hours/24 weeks-intermittent: Lungs, Thorax, or Respiration: fibrosis, focal (pneumocarcinosis)

**CARBON BLACK (continued):**

- LD₅₀ (Oral-Rat) > 15,400 mg/kg: Behavioral: somnolence (general depressant activity)
- LD₅₀ (Skin-Rabbit) > 3 gm/kg: Other changes
- TCLo (Intravenous-Rat) 10 mg/kg/2 minutes: Liver: changes in liver weight; Blood: changes in spleen
- TCLo (Intravenous-Rat) 10 mg/kg/2 minutes: Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels: hepatic microsomal mixed oxidase (dealkylation, hydroxylation, etc.)
- TCLo (Skin-Rat) 11 gm/kg/4 weeks-intermittent: Blood: pigmented or necrotic red blood cells; Liver: changes in liver weight; Nutritional and Gross Metabolic: weight loss or decreased weight gain
- TCLo (Intratracheal-Rat) 16 mg/kg: Lungs, Thorax, or Respiration: other changes; Biochemical: Metabolism (Intermediate); effect on inflammation or mediation of inflammation

**CARBON BLACK (continued):**

- TCLo (Intratracheal-Rat) 15 mg/kg: Lungs, Thorax, or Respiration: other changes; Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels: cytochrome oxidases (including oxidative phosphorylation)
- TCLo (Intratracheal-Rat) 10 mg/kg: Lungs, Thorax, or Respiration: spumon; Biochemical: Metabolism (Intermediate); other proteins, effect on inflammation or mediation of inflammation
- TCLo (Intratracheal-Rat) 7 mg/m³: Lungs, Thorax, or Respiration: other changes; Biochemical: Metabolism (Intermediate); effect on inflammation or mediation of inflammation

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**HAZARDOUS MATERIAL IDENTIFICATION SYSTEM**

<table>
<thead>
<tr>
<th>HEALTH HAZARD</th>
<th>(BLUE)</th>
<th>2*</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLAMMABILITY HAZARD</td>
<td>(RED)</td>
<td>1</td>
</tr>
<tr>
<td>PHYSICAL HAZARD</td>
<td>(YELLOW)</td>
<td>0</td>
</tr>
</tbody>
</table>

**PROTECTIVE EQUIPMENT**

For Routine Industrial Use and Handling Applications

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

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DeWALT CHALKS SDS
11. TOXICOLOGICAL INFORMATION (Continued)

CARCINOGENIC POTENTIAL OF COMPONENTS: The components of these products are listed by agencies tracking the carcinogenic potential of chemical compounds, as follows:

CARBON BLACK: ACGIH TLV-A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); IARC-2B (Possibly Carcinogenic to Humans), MAK-3B (Substances for Which in vivo Tests or Animal Studies Have Yielded Evidence of Carcinogenic Effects that is Not Sufficient for Classification of the Substance in One of the Other Categories); In the Presence of PAHs: NIOSH-Ge (Potential Occupational Carcinogenic, with No Further Categorization)

CRYSTALLINE SILICA, CRYSTALLINE-QUARTZ: ACGIH TLV-A2 (Suspected Human Carcinogen); IARC-1 (Carcinogenic to Humans); Respirable: MAK-1 (Substances that Cause Cancer in Man and Can Be Assumed to Make a Significant Contribution to Cancer Risk); NIOSH-Ge (Potential Occupational Carcinogenic, with No Further Categorization); Respirable: NTP-K (Known to Be a Human Carcinogen)

IRON OXIDE/HEMATITE: ACGIH TLV-A4 (Not Classifiable as a Human Carcinogen); IARC-3 (Unclassifiable as to Carcinogenicity in Humans); MAK-3B (Substances for Which in vitro Tests or Animal Studies Have Yielded Evidence of Carcinogenic Effects that is Not Sufficient for Classification of the Substance in One of the Other Categories)

MAGNESIUM CARBONATE/TALC: MAK-2 (Carcinogenic to Humans); MAK-3B (Substances for Which in vitro Tests or Animal Studies Have Yielded Evidence of Carcinogenic Effects that is Not Sufficient for Classification of the Substance in One of the Other Categories)

The remaining components of this product are not found on the following lists: U.S. EPA, U.S. NTP, U.S. OSHA, U.S. NIOSH, GERMAN MAK, IARC, or ACGIH and therefore are neither considered to be nor suspected to be cancer-causing agents by these agencies.

IRRITANCY OF PRODUCT: These products may cause skin, eye and respiratory irritation.

SENSITIZATION TO THE PRODUCT: The components of these products are not known to cause human skin or respiratory sensitization.

REPRODUCTIVE TOXICITY INFORMATION: The components of these products are not known to cause human mutagenic, embryotoxic, teratogenic or reproductive toxicity in humans.

AGCIIH BIOLOGICAL EXPOSURE INDICES: Currently, there are no ACGIH Biological Exposure Indices (BEIs) determined for the components of these products.

12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

MOBILITY: These products have not been tested for mobility in soil; due to form they are not expected to be mobile.

PERSISTENCE AND BIODEGRADABILITY: These products have not been tested for persistence or biodegradability.

BIO-ACCUMULATION POTENTIAL: These products have not been tested for bio-accumulation potential.

ECOTOXICITY: These products have not been tested for aquatic or animal toxicity. All release to terrestrial, atmospheric and aquatic environments should be avoided.
12. ECOLOGICAL INFORMATION (Continued)
OTHER ADVERSE EFFECTS: The components of these products are not listed as having ozone depletion potential.
EFFECT OF CHEMICAL ON AQUATIC LIFE: These products have not been tested for aquatic toxicity. Releases of large quantities of this material may be detrimental to an aquatic environment.

13. DISPOSAL CONSIDERATIONS
PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations or with regulations of Canada. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.
U.S. EPA WASTE NUMBER: Not applicable.
EUROPEAN EWC CODE: Wastes Not Otherwise Specified: 16 10 99

14. TRANSPORTATION INFORMATION
U.S. DEPARTMENT OF TRANSPORTATION REGULATIONS: These products are NOT classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101.
TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: These products are NOT classified as Dangerous Goods, per regulations of Transport Canada.
INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA): These products are NOT classified as Dangerous Goods, per rules of IATA.
INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION: These products are NOT classified as Dangerous Goods, per rules of IMO.
EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): These products are NOT classified by the United Nations Economic Commission for Europe to be dangerous goods.
TRANSPORT IN BULK ACCORDING TO THE IBC CODE: Not applicable.
ENVIRONMENTAL HAZARDS: These products do not meet the criteria of environmentally hazardous according to the criteria of the UN Model Regulations (as reflected in the IMDG Code, ADR, RID, and ADN); components are not specifically listed in Annex III under MARPOL 73/78.

15. REGULATORY INFORMATION
ADDITIONAL U.S. REGULATIONS:
U.S. SARA REPORTING REQUIREMENTS: The components of these products are not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.
U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for the components of these products. The default Federal SDS submission and inventory requirement filing threshold of 10,000 lb (4,540 kg) therefore applies, per 40 CFR 370.20.
U.S. CERCLA REPORTABLE QUANTITY (RQ): Not applicable.
U.S. TSCA INVENTORY STATUS: Components of these products are on the TSCA Inventory.
OTHER U.S. FEDERAL REGULATIONS: Not applicable.
CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): Crystalline Silica is on the California Proposition 65 lists. Carbon Black, with particles of respirable size, is on the Proposition 65 Lists as well. WARNING! These products contain compounds known to the State of California to cause cancer.
ADDITIONAL CANADIAN REGULATIONS:
CANADIAN DSL/NDSL INVENTORY STATUS: The components of these products are on the DSL Inventory.
OTHER CANADIAN REGULATIONS: Not applicable.
CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: The components of these products are not on the CEPA Priority Substances Lists.
CANADIAN WHMIS CLASSIFICATION and SYMBOLS: Class D2A-Chronic Toxic Effects

ADDITIONAL EUROPEAN REGULATIONS:
SAFETY, HEALTH, AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE PRODUCT: None applicable.
CHEMICAL SAFETY ASSESSMENT: No Data Available. The chemical safety assessment is required for some substances according to European Union Regulation (EC) 1907/2006, Article 14.

16. OTHER INFORMATION
ANSI LABELING (Z129.1, Provided to Summarize Occupational Hazard Information): CAUTION! MAY CAUSE EYE AND RESPIRATORY TRACT IRRITATION. CONTAINS CRYSTALLINE SILICA, WHICH IS A KNOWN HUMAN CARCINOGEN; CONTAINS CARBON BLACK, WHICH IS A KNOWN ANIMAL CARCINOGEN. INGESTION MAY BE HARMFUL. Avoid breathing dusts. Avoid contact with skin, eyes, and clothing. Keep container closed. Use with adequate ventilation. Prevent dust accumulation. Wash thoroughly after handling. Wear gloves, goggles, dust mask, and appropriate body protection during operations that can generate dust.
16. OTHER INFORMATION (Continued)

ANSI LABELING (continued): FIRST-AID: In case of contact, flush skin or eyes with plenty of water. If inhaled, remove to fresh air. If ingested do not induce vomiting. Get medical attention if adverse effects continue after exposure ends. IN CASE OF FIRE: Use water fog, dry chemical, CO₂, or “alcohol” foam. IN CASE OF SPILL: Sweep up spill, avoiding the generation of airborne dusts. Place residual in appropriate container and seal. Consult Safety Data Sheet for additional information.

Classification: Carcinogenic Cat. 2
Signal Word: Warning
Hazard Statements: H351: Suspected of causing cancer. For Blue Chalk Only: EUH032: Contact with acids liberates very toxic gas (hydrogen sulfide).
Precautionary Statements:
Prevention: P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P280: Wear protective gloves/protective clothing/eye protection/face protection.
Response: P308 + P313: IF exposed or concerned: Get medical advice/attention.
Storage: P405: Store locked up.
Disposal: P501: Dispose of contents/container in accordance with all local, regional, national and international regulations.

Classification: Carcinogenic Cat. 3
Risk Phrases: R45: May cause cancer. For Blue Chalk Only: R32: Contact with acids liberates very toxic gas (hydrogen sulfide).
S38: In case of insufficient ventilation wear suitable respiratory equipment. S45: In case of accident or if you feel unwell seek medical advice immediately (show the label where possible). S53: Avoid exposure - obtain special instructions before use.

Hazard Symbol/Pictograms: GHS08
EUH032: Contact with acids liberates very toxic gas (hydrogen sulfide).

DEFINITIONS OF TERMS
A large number of abbreviations and acronyms appear on an SDS. Some of these, which are commonly used, include the following:

CAS #: This is the Chemical Abstract Service Number that uniquely identifies each constituent.

EXPOSURE LIMITS IN AIR:
CEILING LEVEL: The concentration that shall not be exceeded during any part of the working exposure.

DFG MAK Germ Cell Mutagen Categories (continued): 3B: Substances which are suspected of being germ cell mutagens because of their genotoxic effects in mammalian somatic cell in vivo; in exceptional cases, substances for which there are no in vivo data, but which are clearly mutagenic in vitro and structurally related to known in vivo mutagens. 4: Not applicable (Category 4 carcinogenic substances are those with non-genotoxic mechanisms of action. By definition, germ cell mutagens are genotoxic. Therefore, a Category 4 for germ cell mutagens cannot apply. At some time in the future, it is conceivable that a Category 4 could be established for genotoxic substances with primary targets other than DNA [e.g. purely aneugenic substances] if research results make this seem sensible.) 5: Germ cell mutagens, the potency of which is considered to be so low that, provided the MAK value is observed, their contribution to genetic risk for humans is expected not to be significant.

EXPOSURE LIMITS IN AIR (continued):

DFG MAK Germ Cell Mutagen Categories (continued): 3B: Substances which are suspected of being germ cell mutagens because of their genotoxic effects in mammalian somatic cell in vivo; in exceptional cases, substances for which there are no in vivo data, but which are clearly mutagenic in vitro and structurally related to known in vivo mutagens. 4: Not applicable (Category 4 carcinogenic substances are those with non-genotoxic mechanisms of action. By definition, germ cell mutagens are genotoxic. Therefore, a Category 4 for germ cell mutagens cannot apply. At some time in the future, it is conceivable that a Category 4 could be established for genotoxic substances with primary targets other than DNA [e.g. purely aneugenic substances] if research results make this seem sensible.) 5: Germ cell mutagens, the potency of which is considered to be so low that, provided the MAK value is observed, their contribution to genetic risk for humans is expected not to be significant.

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DEFINITIONS OF TERMS (Continued)

EXPOSURE LIMITS IN AIR (continued):

DFG MAK Pregnancy Risk Group Classification: Group A: A risk of damage to the developing embryo or fetus has been unequivocally demonstrated. Exposure of pregnant women can lead to damage of the developing organism, even when MAK and BAT (Biological Tolerance Values) values are observed.

DFG MAK Pregnancy Risk Group Classification (continued): Group B: Currently available information indicates a risk of damage to the developing embryo or fetus must be considered to be unlikely. Damage to the developing organism cannot be excluded when pregnant women are exposed, even when MAK and BAT values are observed.

Group C: There is no reason to fear a risk of damage to the developing embryo or fetus when MAK and BAT values are observed.

Group D: Classification in one of the groups A-C is not yet possible, although the data available may indicate a trend; they are not sufficient for final evaluation.

IDLH—Immediately Dangerous to Life and Health: This level represents a concentration from which one can escape within 30-minutes without suffering escape-preventing or permanent injury.

LOQ: Limit of Quantitation.

MAK: Federal Republic of Germany Maximum Concentration Values in the workplace.

NE: Not Established. When no exposure guidelines are established, an entry of NE is made for reference.

NICE: Notice of Intended Change.

NIOSH CEILING: The exposure that shall not be exceeded during any part of the workday. If instantaneous monitoring is not feasible, the ceiling shall be assumed as a 15-minute TWA exposure (unless otherwise specified) that shall not be exceeded at any time during a workday.

NIOSH RELs: NIOSH’s Recommended Exposure Limits.

PEL-Permissible Exposure Limit: OSHA’s Permissible Exposure Limits. This exposure value means exactly the same as a TLV, except that it is enforceable by OSHA. An entry of NE is made when no OSHA exposure guidelines are available. The June 1981 Air Contaminants Rules (Federal Register: 56: 35338-35351 and 56: 40191).

Both the current PELs and the vacated PELs are indicated. The phrase, “Vacated 1989 PEL,” is placed next to the PEL that was vacated by Court Order.

TLV-Time Weighted Average: Time Weighted Average exposure that should not be exceeded at any time during a workday, even if the 8-hr TWA is within the TLV-TWA, PEL-TWA or REL-TWA.

TWA-Time Weighted Average: Time Weighted Average exposure of a conventional 8-hr (TLV, PEL) or up to a 10-hr (REL) workday and a 40-hr workweek.

Hazardous Materials Identification System Hazard Ratings (continued): Flammability Hazard (continued): 3 (Serious Hazard—Liquids and solids that can be ignited under almost all ambient temperature conditions. Materials in this degree produce hazardous atmospheres with air under almost all ambient temperatures, or, unaffected by temperature, are readily ignitable. These materials have a flash point below 22.8°C [73°F] and have a boiling point at or above 38°C [100°F].)

Hazardous Materials Identification System Hazard Ratings: 1 (Water Reactivity: Materials that do not react with water. Organic Peroxides: Materials that are normally stable, even under fire conditions and will not react with water. Explosives: Substances that are Non-Explosive. Unstable Compressed Gases: No Rating. Pyrophoric: No Rating. Oxidizers: No 0 rating allowed. Unstable Reactives: Substances that will not polymerize, decompose, condense or self-react; 1 (Water Reactivity: Materials that change or decompose upon exposure to moisture. Organic Peroxides: Materials that are normally stable, but can become unstable at high temperatures and/or pressures. Unstable Reactives: Materials that change or decompose upon exposure to moisture.)

Hazardous Materials Identification System Hazard Ratings: 2 (Water Reactivity: Materials that may react violently with water. Organic Peroxides: Materials that, in concentrations normally unstable, are not normally unstable, and react violently with water. Oxidizers: Materials that react violently with water. Pyrophorics: Materials that may react violently with water.)
FLAMMABILITY HAZARD: 4 Materials that will rapidly or completely vaporize at atmospheric pressure and normal ambient temperature or that are readily dispersed in air under those conditions: Flammable gases. Flammable compressed liquefied gases such as those that make up the gaseous materials that is liquid while under pressure and has a flash point below 22.8°C (73°F) and a boiling point below 37.8°C (100°F) (i.e. Class IA liquids). Materials that ignite when exposed to air. Solids containing greater than 0.5 percent by weight of a flammable or combustible solvent are rated by the closed cup flash point of the solvent. 

INSTABILITY HAZARD: 0 Materials that in themselves are normally stable, even under fire conditions: Materials that have an estimated instantaneoupower density (product of heat of reaction and reaction rate) at 250°C (482°F) before 0.01 W/mL. Materials that do not exhibit an exotherm at temperatures less than or equal to 500°C (932°F) when tested by differential scanning calorimetry. 1 Materials that in themselves are normally stable, but that can become unstable at elevated temperatures and pressures: Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 0.01 W/mL and below 10 W/mL. 2 Materials that readily undergo violent chemical change at elevated temperatures and pressures: Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 10 W/mL and below 100 W/mL. 3 Materials that in themselves are capable of detonation or explosive decomposition or explosive reaction, but that require a strong initiating source or that must be heated under confinement before ignition: Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 100 W/mL and below 1000 W/mL. Materials that are sensitive to thermal or mechanical shock at elevated temperatures and pressures. 4 Materials that in themselves are readily capable of detonation or explosive decomposition or explosive reaction at normal temperatures and pressures: Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) of greater. Materials that are sensitive to local thermal or mechanical shock at normal temperatures and pressures. 

FLAMMABILITY LIMITS IN AIR: 

Much of the information related to fire and explosion is derived from the National Fire Protection Association (NFPA). Flash Point - Minimum temperature at which a liquid gives off sufficient vapors to form an ignitable mixture with air. Autoignition Temperature: The minimum temperature required to initiate combustion in air without other source of ignition. Ignitability: The lowest percent of vapor by air, by volume, that will explode or ignite in the presence of an ignition source. UEL - the highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.

ECOLOGICAL INFORMATION: 

Environmental Characteristics: BEC - Bioconcentration Factor, which is used to determine if a substance will concentrate in lifeforms which consume contaminated plant or animal matter. TEC - median threshold limit; Coefficient of Oil/Water Distribution is represented by log Kow or log Koc and is used to assess a substance's behavior in the environment.

TOXICOLOGICAL INFORMATION: 

Human and Animal Toxicology: Possible health hazards as derived from human, animal studies, or from the results of studies with similar compounds are presented. Definitions of some terms used in this section are: LD50 - Lethal Dose (solids & liquids) which kills 50% of the exposed animals; LC50 - Lethal Concentration (gases) which kills 50% of the exposed animals; ppm concentration expressed in parts of material per million parts of air or water; mg/kg concentration expressed in weight of substance per weight of air or water; mg/m3 concentration expressed in weight of substance per volume of air; mg/kg quantity of material, by weight, administered to a test subject, based on their body weight in kg. Other measures of toxicity include TDLo, the lowest dose to cause a symptom and TCLo the lowest concentration to cause a symptom; TDLo, LDo, and LLo or TC, TLo, LLo and LCo, the lowest dose (or concentration) to cause lethal or toxic effects. Cancer Information: The sources are: IARC - the International Agency for Research on Cancer; NTP - the National Toxicology Program; RTCECS - Registry of Toxic Effects of Chemical Substances, OSHA and CAL/OSHA. IARC and NTP rate chemicals on a scale of decreasing potential to cause human cancer with rankings from 1 to 4. Subrankings (2A, 2B, etc.) are also used. Other Information: BEI - ACGIH Biological Exposure Indices, represent the levels of determinants and are used to assess a substance's behavior in the environment.

REGULATORY INFORMATION: 

U.S. and CANADA: 

ACGIH: American Conference of Governmental Industrial Hygienists, a professional association which establishes exposure limits. This section explains the impact of various laws and regulations on the material. EPA is the U.S. Environmental Protection Agency. NIOSH is the National Institute of Occupational Safety and Health, which is the research arm of the U.S. Occupational Safety and Health Administration (OSHA). WHMIS is the Canadian Workplace Hazardous Materials Information System (WHMIS). Yashan (Trading) Co., Ltd. is the manufacturer of Transportation and the Transport Canada respectively. Superfund Amendments and Reauthorization Act (SARA); the Canadian Domestic/Nondomestic Substances List (DSL/NDSL); The U.S. Toxic Substance Control Act (TSCA); the Clean Air Act; MARPOL; the Marine Pollution Treaty; the Montreal Protocol; the Rotterdam Convention; Environmental Response, Compensation, and Liability Act (CERCLA or Superfund); and various state regulations. This section also includes information on the precautionary warnings appear which on the material's package label. OSHA - U.S. Occupational Safety and Health Administration.