SECTION 1: IDENTIFICATION

Manufacturer’s Name: Ralph Clayton & Sons
Address: P O Box 3015, Lakewood, NJ 08701
Emergency Telephone Number: 732-751-7668
Telephone Number for Information: 732-751-7668

Product Data:
Trade Name: Crushed Concrete
Synonyms: Recycled Hardened Concrete, Recycled Crushed Concrete, Road Blend

SECTION 2: HAZARDOUS IDENTIFICATION

Primary Routes of Entry:
Inhalation: YES Skin: NOT LIKELY Ingestion: NO

Acute:

Eye contact
Direct contact with dust may cause irritation by mechanical abrasion.
Exposure to wet material may be slightly caustic and cause irritation or injury.

Skin Contact:
Direct contact with dust may cause irritation by mechanical abrasion.
Exposure to wet material may be slightly caustic and cause irritation or injury.

Skin Absorption: Not expected to be a significant exposure route.

Ingestion:
If ingested, the material may become slightly caustic and cause tissue irritation.
Ingestion of large amounts may cause gastrointestinal irritation and blockage.

Inhalation:
Dusts may irritate the nose, throat, and respiratory tract. Coughing, sneezing and shortness of breath may occur following exposures in excess of appropriate exposure limits.

Chronic:

Inhalation:
Chronic exposure to respirable dust in excess of appropriate exposure limits may cause lung disease. Silicosis may result from excessive exposure to respirable silica dust for prolonged periods. Not all individuals with silicosis will exhibit symptoms. Silicosis is progressive and symptoms can appear at any time, even after exposure has ceased. Symptoms may include shortness of breath, coughing or right heart enlargement and/or failure. Persons with silicosis have an increased risk of pulmonary tuberculosis infection. Tobacco smoking may increase the risk of developing lung disorders, including emphysema and lung cancer.

Carcinogenicity:
Crushed concrete is not listed as a carcinogen by the National Toxicology Program (NTP), OSHA or the International Agency for Research on Cancer (IARC). However, crystalline silica is now classified by IARC as a known human carcinogen (Group 1). The NTP has characterized respirable silica as "reasonably anticipated to be (a) carcinogen" (Group 2). Prolonged and repeated breathing of silica may cause lung cancer.

Medical Conditions Generally Aggravated by Exposure:
Inhaling respirable dust may aggravate existing respiratory system disease(s) and/or dysfunctions such as emphysema or asthma. Exposure may aggravate existing skin and/or eye conditions.
### SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS***

<table>
<thead>
<tr>
<th>Component</th>
<th>Percent by Wt.</th>
<th>CAS No.</th>
<th>OSHA PEL-TWA (mg/m³)</th>
<th>ACGIH TLV-TWA (mg/m³)</th>
<th>NIOSH (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate Mixture</td>
<td>60-95</td>
<td>1317-65-3</td>
<td>15(T)*</td>
<td>10 (T) 5(R)</td>
<td>10 (T) 5(R)</td>
</tr>
<tr>
<td>Crystalline Silica</td>
<td>0-90</td>
<td>14808-60-7</td>
<td>[30/(%SiO₂+2)]T</td>
<td>0.025     .05</td>
<td></td>
</tr>
<tr>
<td>Portland Cement**</td>
<td>3-40</td>
<td>65997-15-1</td>
<td>10(T)</td>
<td>1(R) 5(R)</td>
<td>10(T) 5(R)</td>
</tr>
<tr>
<td>Particulate not Otherwise Regulated</td>
<td>---</td>
<td>NA</td>
<td>15(T)</td>
<td>10(T) 5(R)</td>
<td>---- 3(R)</td>
</tr>
</tbody>
</table>

*T = Total Dust  
R = Respirable Dust  
**Exposure limits for components note with ** contain no asbestos and <1% crystalline silica.  
***Individual composition of ingredients will vary between types of crushed concrete. It will also vary depending upon the original properties and composition of materials crushed.

May contain trace amounts of organic and inorganic material.

Concrete is a mixture of gravel or rock, sand, Portland Cement and water. It may also contain fly ash, slag, silica fume, calcined clay, fibers (metallic or organic) and color pigment. Properties and composition of crushed concrete can vary depending on the original properties and composition of the recovered concrete.

Concrete contains cement which is made from materials mined from the earth and processed using energy provided by fuels. Trace amounts of chemicals may be detected during chemical analysis. For example, cement may contain trace amounts of calcium oxide (also known as free lime or quick lime), free magnesium oxide, potassium and sodium sulfate compounds, chromium compounds, nickel compounds and other trace compounds.

### SECTION 4: FIRST AID MEASURES

**Routes of Entry:**
- **Eye Contact:** Rinse eyes thoroughly with water for at least 15 minutes, including under lids, to remove all particles. Seek medical attention for abrasions and burns.
- **Skin Contact:** Wash with cool water and a pH neutral soap or a mild skin detergent. Seek medical attention for rash, burns, irritation, dermatitis.
- **Inhalation:** Move person to fresh air. Seek medical attention for discomfort or if coughing or other symptoms do not subside.
- **Ingestion:** Do not induce vomiting. If conscious, have person drink plenty of water. Seek medical attention or contact poison control center immediately.

### SECTION 5: FIRE FIGHTING MEASURES

- **Flash Point:** N/A
- **Flammable Limits:** N/A
- **LEL:** N/A
- **UEL:** N/A
- **Extinguishing Media:** N/A
- **Special Fire Fighting Procedures:** None
- **Unusual Fire and Explosion Hazards:** None

### SECTION 6: ACCIDENTAL RELEASE MEASURES

The personal protection and controls identified in Section 8 or the SDS should be applied as appropriate.

If material is Released or Spilled:

Spilled materials, where dust can be generated, may overexpose cleanup personnel to respirable silica and dust. Wetting of spilled material and/or use of respiratory protective equipment may be necessary. Do not dry sweep spilled material.

Waste Disposal Method:

Dispose of waste materials only in accordance with applicable federal, state and local laws and regulations. May be recycled.
SECTION 7: HANDLING AND STORAGE
Respirable silica and dust may be generated during crushing, processing, handling and storage when hardened product is subjected to mechanical forces. The personal protection and controls identified in Section 8 of the SDS should be applied as appropriate. Do not store or handle near food and beverages or smoking materials.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
(See Section 3 for permissible exposure limits)

Ventilation:
Local exhaust or general ventilation adequate to maintain exposures below appropriate exposure limits.

Other:
Respirable dust and silica levels should be monitored regularly. Dust and silica levels in excess of appropriate exposure limits should be reduced by all feasible engineering controls, including (but not limited to) wet suppression, ventilation, process enclosure and enclosed employee work stations.

Respiratory Protection:
When dust or silica levels exceed or are likely to exceed appropriate exposure limits, follow MSHA or OSHA regulations, as appropriate, for use of NIOSH-approved respiratory protection equipment.

Skin Protection:
Protective gloves, shoes and protective clothing should be worn to avoid contact with skin.

Eye Protection:
Safety glasses with side shields should be worn as minimum protection. Dust goggles should be worn when excessive (visible) dust conditions are present or anticipated. Contact lenses should not be worn when working with this product.

Hygiene:
Periodically wash exposed skin with pH-neutral soap. Wash again before eating, drinking, smoking and using toilet facilities. Wash work clothes after each use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Various Colors and Shapes</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>NA</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>NA</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>2.5</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>NA</td>
</tr>
<tr>
<td>pH (in water)</td>
<td>7</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>None-Solid</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>None-Solid</td>
</tr>
<tr>
<td>Viscosity</td>
<td>None-Solid</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Not Soluble</td>
</tr>
</tbody>
</table>

SECTION 10: STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>STABLE</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>None</td>
</tr>
<tr>
<td>Incompatibility (Material to Avoid)</td>
<td>None</td>
</tr>
<tr>
<td>Hazardous Decomposition or By-Products</td>
<td>None</td>
</tr>
<tr>
<td>Hazardous Polymerization</td>
<td>Will Not Occur</td>
</tr>
</tbody>
</table>

SECTION 11: TOXICOLOGICAL INFORMATION
Quartz exposure may lead to silicosis, asthma, emphysema or other respiratory problems. Exposure to quartz dust has been associated with lung cancer. Acute exposure to dust from these products may irritate mucous membranes, such as eye, nose and throat; may cause skin irritation and may aggravate existing respiratory conditions.

SECTION 12: ECOLOGICAL INFORMATION AND - NA

SECTION 13: DISPOSAL CONSIDERATIONS
Dispose of wasted and containers in compliance with applicable Federal, State, Provincial and Local regulations.

SECTION 14: TRANSPORT INFORMATION
This product is not classified as a Hazardous Material under U.S. DOT or Canadian TDG regulations.
SECTION 15: REGULATORY INFORMATION

OSHA/MSHA Hazard Communication: This product is considered by OSHA/MSHA to be a hazardous chemical and should be included in the employer’s hazard communication program.

CERCLA/SUPERFUND: This product is not listed as a CERCLA hazardous substance.

EPRCA SARA SECTION 313: This product contains none of the substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

RCRA: If discarded in its purchased form, this product would not be hazardous waste either by listing or characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product should be classified as a hazardous waste.

TSCA: Portland Cement and crystalline silica are exempt from reporting under the inventory update rule.

California Proposition 65: Crystalline silica (airborne particulates of respirable size) and Chromium (hexavalent compounds) are substances known by the State of California to cause cancer.

WHMIS/DSL: Products containing crystalline silica and calcium carbonate are classified as D2A, E and are subject to WHMIS requirements.

SECTION 16: OTHER INFORMATION

This Safety Data Sheet is provided in accordance with the OSHA Hazard Communication Standard (CFR 1910.1200). The SDS reflects the most recent, significant information in our possession. The OSHA Standard requires that all personnel be provided with accurate information on the hazards of the chemical they handle and be trained in proper work practices to minimize the risks from the hazards.

The SDS should not be construed as the sum total of all protective measures that may be taken. It is the responsibility of the employer to evaluate the information and to determine the extent of the hazard and what personal protective measures should be taken.

The information contained herein is based on data considered accurate; however, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof.

If we may be of further assistance, please do not hesitate to contact us.

JULY 2013