Lambert Southwest (903)657-4680  
Division of G. W. Holladay Interests Inc.  
P O Box 1111, Henderson TX 75653  
Haz Mat Emergency Infotrac 1-800-535-5053  
Product: Chocolate Brown  
Date: January 2012

HAZARD MATERIAL IDENTIFICATION SYSTEM

Health Hazard 1 - Slight
Flammability Hazard 0 - Minimal
Reactivity Hazard 0 - Minimal
Personal Protection E - Glasses, Gloves, Dust Resp

SECTION I. MATERIAL IDENTIFICATION

Trade/Material Name: UMBER - Raw & Burnt
Description: Inorganic Metal Oxide Mixture
Other Designations: 219-0040 Chocolate Brown
Chemical Name: Iron Oxide + Manganite + Silica + Carbon
C.A.S. No: 12713-03-0

SECTION II. INGREDIENTS AND HAZARDS

<table>
<thead>
<tr>
<th>INGREDIENT NAME</th>
<th>CAS NO.</th>
<th>PERCENT</th>
<th>EXPOSURE LIMITS</th>
</tr>
</thead>
</table>
| Iron Oxide      | 1309-37-1 | 48-57   | ACGIH TLV: 5MG/M³ TWA  
(Iron Oxide Fume as Fe) |
| Manganite       | 1317-34-6 | 1-15    | ACGIH-TLV: 5MG/M³ TWA  
(Iron Oxide Fume as Fe) |
| Crystalline Silica | 14808-60-7 | 0.1-4.0 | ACGIH TLV: 0.1 mg/M³ TWA  
(Respirable Dust) |
| Carbon          | 1333-86-4 | 0.0-4   | ACGIH TLV: 3.5mg/M³TWA  
(Ingredients and Hazards continued on next page) |
Manganese compounds less than 10%

Note: There is an 8-hour TWA OSHA-PEL of 10mg/m³ and ACGIH-TLV of 5mg/m³ for iron oxide Fume. In normally accepted usages, iron oxide pigments would NOT be present in the form of a fume.

This product does not contain toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

### SECTION III. PHYSICAL/CHEMICAL CHARACTERISTICS

| Appearance and Odor:          | Reddish Brown Powder, No Odor |
| Solubility in Water (%)       | Insoluble                      |
| Specific Gravity (H₂O=1)      | 3.0-3.6                        |

### SECTION IV. FIRE AND EXPLOSION DATA

- **Flash Point (method):** Non-flammable  
  - Limits: LEL%: N/A  
  - UEL%: N/A

- **Extinguishing Media:** As appropriate for surrounding combustibles. Does not burn or support combustion. No fire or explosion hazard.

- **Unusual Fire or Explosion Hazards:** Under fire conditions irritating and/or toxic aerosols or gasses may be present.

- **Special Fire fighting Procedures:** Fire fighter should wear self-contained breathing apparatus.

### SECTION V. REACTIVITY DATA

Material is stable - Hazardous polymerization will not occur

- **Chemical incompatibilities:** Concentrated acid solutions. Material contains manganese which when exposed to acids can liberate hazardous gases.

- **Hazardous Decomposition Products:** None known.
### SECTION VI. HEALTH HAZARD DATA

**Summary of Health Risks and Symptoms of Exposure:** Skin contact may cause mechanical irritation due to the abrasion. Eye contact will result in no specific effects other than general particulate irritation in the eye. Not absorbed by the body. Excessive exposure above the TLV can give mild pulmonary irritation.

**Principal Routes of Entry:** Inhalation, ingestion, skin and eye contact.

**Acute Effects:** Inhalation of the dust may cause mechanical irritation to the respiratory tract. Skin and eye contact may cause a mechanical abrasion irritation.

**Chronic Health Effect(s):** Long term overexposure to silica causes silicosis, a form of pulmonary fibrosis. Continued exposure to silica can lead to cardiopulmonary impairment.

**Emergency and First Aid Procedures:**

<table>
<thead>
<tr>
<th>Route of Exposure</th>
<th>Instructions</th>
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</thead>
<tbody>
<tr>
<td>Eye Contact</td>
<td>Flush thoroughly with plenty of water for at least 15 minutes. Get medical help if irritation persists.</td>
</tr>
<tr>
<td>Skin Contact</td>
<td>Wash skin with mild soap and water.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Remove to fresh air. Get medical help for any breathing difficulty.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>If conscious, give large quantities of water to induce vomiting. Get medical attention.</td>
</tr>
</tbody>
</table>

Crystalline silica which may be present in quantities greater than 0.1% has been reviewed by IARC. They found limited evidence for carcinogenicity of crystalline silica in humans and sufficient evidence in experimental animal.

### SECTION VII. PRECAUTIONS FOR HANDLING, USE OR DISPOSAL

**Handling & Storage** Store dry at ambient temperature away from food & beverages. Avoid breathing dust. Avoid contact with eyes and skin. Wash thoroughly after handling.

**Spill/Leak procedures:** Those involved in clean-up of spills should use respiratory protection for airborne dust. Vacuum or scoop up spilled material for recovery or disposal, avoiding dusting conditions and using good ventilation. Wetting the spill with a water spray may help to keep airborne dust levels down.

(Precautions for Handling, etc. continued on next page)
Waste Management/ Disposal: Refer to any local, State or Federal regulations for specific disposal information. Pursuant to 40 CFR part 261 of the Resource Conservation & Recovery Act (RCRA) regulations currently in effect, discarded Iron Oxide would not be classified as a hazardous waste.

### SECTION VIII. SPECIAL PROTECTION INFORMATION

**Personal Protective Equipment:**

- **Goggles:** Safety glasses with side shields or dust tight goggles.
- **Gloves:** Rubber, cloth, or plastic gloves as appropriate.
- **Respirator:** If exposure limits are exceeded, an appropriate NIOSH approved dust respirator should be used.

**Workplace Considerations:**

- **Ventilation:** Provide adequate exhaust ventilation to meet TLV requirements in the workplace. An exhaust filter system may be required to avoid environmental contamination.
- **Safety Stations:** An eye wash station should be available to the area of use.
- **Other:** Good industrial hygiene practice requires that employee exposure be maintained below the recommended TLV. This is preferably achieved through the provision of adequate ventilation where necessary. Where dust cannot be controlled in this way, personal respiratory protection should be employed.

### SECTION IX. SPECIAL PRECAUTIONS

**DOT Class:** Not regulated

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