

Material Safety Data Sheet  
May be used to comply with  
OSHA's Hazard Communication Standard,  
29 CFR 1910.1200. Standard must be consulted  
for specific requirements.

U.S Department of Labor  
Occupational Safety and Health Administration  
(Non-Mandatory Form)  
Form Approved  
OMB No. 1218-0072

IDENTITY (As Used on Label and List)

## Bonide Hydrated Lime

**ID # 977**

Date: February 28, 2013

### Section I

---

Bonide Products, Inc. (800) 424-9300  
6301 Sutliff Road (315) 736-8231  
Oriskany, NY 13424

### Section II - Hazardous Ingredients/Identity

---

| Hazardous Components (Specific Chemical Identity): Common Name(s) | OSHA PEL            | ACGIH TLV                          | Other Limits | % (Optional) |
|---|---------------------|------------------------------------|--------------|--------------|
| Calcium Oxide CAS# 1305-78-8                                      | 15mg/m <sup>3</sup> | 5mg/m <sup>3</sup> (fugitive dust) |              |              |
| Silicon Dioxide CAS# 7631-86-9                                    |                     |                                    |              |              |
| Magnesium Oxide CAS# 1309-48-4                                    |                     |                                    |              |              |
| Trace elements  |                     |                                    |              |              |
| Chemically combined water   |                     |                                    |              |              |

NFPA RATING: HEALTH 1 FLAMMABILITY 0 REACTIVITY 1 SPECIAL None

### Section III - Physical/Chemical Ingredients

---

|  |   |
|--|---|
| CHEMICAL NAME: Calcium Hydroxide                                 | CHEMICAL FAMILY: Alkaline Earth Hydroxide |
| BOILING POINT: Decomposes @ 1076 degrees F. TO CaO               | SPECIFIC GRAVITY: 2.2-2.4                 |
| VAPOR PRESSURE (Non-Aerosol): N/A                                | VAPOR DENSITY: N/A                        |
| SOLUBILITY IN WATER BY WT.: Slight                               | VOLATILES BY VOLUME: Non-Volatile         |
| EVAPORATION RATE: N/A  | pH (saturated sol.): 12.454 @ 25°/c       |
| DOT IDENTIFICATION NUMBER: None                                  | DOT HAZARD CLASSIFICATION: None           |
| APPEARANCE AND ODOR: White, off-white; faint musty, earthy odor. |   |

### Section IV - Fire and Explosion Data

---

FLASH POINT: Non -explosive. FLAMMABLE LIMITS: N/A LEL N/A UEL N/A  
AUTO IGNITION TEMPERATURE: N/A EXTINGUISHING MEDIA: Non-combustible  
SPECIAL FIRE-FIGHTING PROC.: N/A  
UNUSUAL FIRE AND EXPLOSION HAZARD: Hydrated lime in itself is not flammable.

### Section V - Reactivity Data

---

STABILITY: Stable unless in contact with acids. HAZARDOUS POLYMERIZATION: Will not occur.  
CONDITIONS TO AVOID: Water leaks in bulk storage tanks will turn the lime into a slurry. High atmospheric humidity can air -slake hydrated lime causing the lime to recarbonate.  
INCOMPATIBILITY: Should not be mixed or stored in contact with chemicals such as acids or that have water of crystallization.  
HAZARDOUS DECOMPOSITION PRODUCTS: None

### Section VI - Personal Protection Information

---

VENTILATION REQUIREMENTS: As necessary to maintain dust levels below TLV.  
SPECIFIC PERSONAL PROTECTIVE EQUIPMENT: The following equipment should be used when worker is in direct contact with hydrated lime for prolonged periods:  
EYE - Tight fitting goggles. RESPIRATORY - Disposable particulate nuisance dust mask.  
GLOVES - Gauntlet type work gloves.  
OTHER - Full-length shirt with collar that buttons at neck, long pants that fit over boots or work shoes, cap for head; avoid allowing lime to remain on skin in areas where clothing fits tightly and could chafe or rub. If lime gets inside of shoes, remove and clean out immediately.

## Section VI - Health Hazard Information

---

### ROUTES OF EXPOSURE HAZARD CLASSIFICATION BASIS SOURCE

INHALATION: Nil (except for possibly extremely concentrated, prolonged inhalation)

SKIN CONTACT: Extended exposure will remove oils from skin causing drying and irritation. Use of skin creams after washing is recommended.

SKIN ABSORPTION: Nil

EYE CONTACT SEVERE IRRITANT - The only serious hazard pertains to eyes. The sensitive, moist, membrane in the eyeball could be burned severely, causing blindness.

INGESTION: Non-toxic.

EFFECTS OF OVEREXPOSURE: ACUTE: N/A CHRONIC: N/A

CARCINOGENICITY: NTP? None IARC? None. OSHA REG. No

### EMERGENCY AND FIRST AID PROCEDURES

EYES: Flush out eye thoroughly with water for at least 15 minutes and call a Physician immediately. SKIN: Wash excess off skin immediately. Apply standard ointment for burns. See Physician if redness or irritation continues. INHALATION: Nil. INGESTION: Nil (alkalinity of lime could be neutralized by drinking large volumes of water and diluted vinegar).

## Section VII - Precautions for Safe Handling/Use

AQUATIC TOXICITY: At site of the spill, the hydrated lime will cause the pH of the area to rise to 9.5 - 10.5, which may kill some aquatic life in the immediate area. Natural currents, wind and agitation from boat transport causes the micro-sized lime hydrate particles to disseminate rapidly over a wide area. The resulting dilution causes the pH to drop below 9 within minutes or less.

WASTE DISPOSAL METHOD: A non-hazardous landfill is a suitable location for disposal or use in agriculture.

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: 1) For inland waterways, salvage or recovery of bulk hydrated lime is futile. Agitating the site of the spill with outboard motor, etc. will accelerate distribution of lime over a wide area so that resulting dilution renders it harmless. 2) For spills on land most can be recovered by scooping or shoveling from land; road, etc.

NEUTRALIZING CHEMICALS: Water and Carbon Dioxide from the air carbonate the lime to a neutral limestone.

## Section VIII - Environmental and Disposal Information

---

### PRECAUTIONARY STATEMENTS

CAUTION - Prolonged contact with hydrated lime in the presence of moisture may cause irritation or burns to wet skin. In case of contact with eyes, flush thoroughly with water and call a physician immediately. Keep out of reach of children.

### OTHER HANDLING AND STORAGE REQUIREMENTS

Hydrated lime is a safe material to use if workers will only follow a few precautions and dress properly (as described in Section VII).

- Don't permit hydrated lime dust to accumulate on exposed skin or clothing, brush it off.
- Only serious hazards involves the eyes. To be safe against unexpected contingencies, wear tight fitting goggles.
- Storage -- Keep dry.

NOTICE: This information is believed to be accurate and reliable. However, no guarantee expressed or implied is made with respect to the information contained herein.

**KEEP OUT OF REACH OF CHILDREN**

### ABBREVIATION KEY

---

N/A: NOT AVAILABLE OR APPLICABLE      N/E: NOT ESTABLISHED      ND: Not Determined  
 TLV: THRESHOLD LIMIT VALUE      TWA: TIME WEIGHTED AVG./8 HOUR WORKDAY  
 STEL: SHORT TERM EXPOSURE LIMIT D.O.T.: DEPARTMENT OF TRANSPORTATION

### DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.