



Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. This 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) OPF42 (Hydrated Aggregate Base) | Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that. |
|--|---|

Section I

| | |
|---|--|
| Manufacturer's Name NISCO/LA Ash, Inc. | Emergency Telephone Number Transport Emergency (CHEMTREC) 1-800-424-5300 Medical Emergency 1-800-441-3637 |
| Address (Number, Street, City, State, and ZIP Code) 3400 Houston River Road | Telephone Number for Information Plant (337) 494-6125 Product Information (281) 293-5550 |
| Westlake, LA 70669 | Date Prepared/Revision Date 3/26/1999/REV: 12/18/2008 |
| MSDS Code: COKC015 | Signature of Preparer (optional) s./ D. King |

Section II - Hazard Ingredients/Identity Information

| Hazardous Components (Specific Chemical Identity; Common Name(s)) | OSHA PEL | ACGIH TLV | Other Limits Recommended | % (optional) |
|---|--|---|--------------------------|-------------------------------------|
| Calcium Sulfate Dihydrate (CaSO ₄ .2H ₂ O) (CAS #10101-41-4) Hemihydrate (CaSO ₄ .1/2 H ₂ O) (CAS #10034-76-1) Anhydrite (CaSO ₄) (CAS #7778-18-9) Total Dust Respirable Dust | 15 mg/m ³ 5 mg/m ³ | 10 mg/m ³ (Containing no asbestos and <1% free silica) | 8-Hr. TWA 8-Hr. TWA | 43-70 <1 |
| Calcium Hydroxide (Ca(OH) ₂) (CAS #1305-62-0) | None Established | 5 mg/m ³ | 8-Hr. TWA | 20-30 |
| Calcium Carbonate (CaCO ₃) (CAS # 471-34-1) Total Dust Respirable Dust | 15 mg/m ³ 5 mg/m ³ | 1C mg/m ³ | 8-Hr. TWA 8-Hr. TWA | 4-22 |
| Quartz (SiO ₂) (CAS #14808-60-7) Total Dust Respirable Dust | 30 mg/m ³ / % SiC ₂ + 2 10 mg/m ³ / % SiO ₂ + 2 | 0.1 mg/m ³ Or See: Christobalite (14464-46- | 8-Hr. TWA 8-Hr. TWA | <2.5 |

| | | | | |
|---|----------------------|---|-----------|---------|
| | | 1), Fused Silica (60676-86-0), Tridymite (15468-32-2), Tripoli (1317-95-9), Notice of Intended Changes (1998) | | |
| Magnesium Hydroxide (Mg(OH) ₂) (CAS #1309-42-8) | | | | 1.7-2.5 |
| Magnesium Oxide (MgO) (CAS #1309-48-4) | 15 mg/m ³ | 10 mg/m ³ | 8-Hr. TWA | <1 |
| Calcium Oxide (CaO) (CAS #1305-78-8) | 5 mg/m ³ | 2 mg/m ³ | 8-Hr. TWA | <1 |
| Free Moisture (H ₂ O) (CAS #7732-18-5) | | | | 5-10 |
| Miscellaneous | | | | <2 |

AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

Section III - Physical/Chemical Characteristics

| | | | |
|---|------------------------|---|-----------|
| Boiling Point N/A | N/A | Specific Gravity (H₂O = 1) N/A | pH |
| Vapor Pressure (mm Hg.) Vapor Density (AIR = 1) | N/A | Melting Point | NA |
| Bulk Density (Loose) | Approx. 70/lb. cu. ft. | Evaporation Rate (Butyl Acetate = 1) | NA |
| Solubility in Water Insoluble | | | |
| Appearance and Odor Ashen Grey to White; Granular or Crushed Stone; No Odor | | | |

Section IV - Fire and Explosion Hazard Data

| | | | |
|---|---|-------------------|-------------------|
| Flash Point (Method Used) N/A | Flammable Limits Will not burn. | LEL N/A | UEL N/A |
| Extinguishing Media Use media appropriate for surrounding material. | | | |
| Special Fire Fighting Procedures Wear self-contained breathing apparatus. | | | |
| Unusual Fire and Explosion Hazards N/A | | | |

Section V - Reactivity Data

| | | | |
|--|-----------------------|---|------------------------------|
| Stability | Unstable | | Conditions to Avoid |
| | Stable | X | Skin contact and inhalation. |
| Incompatibility (Materials to Avoid) None reasonably foreseeable. Reacts exothermically to release heat when water is added. | | | |
| Hazardous Decomposition or Byproducts Hazardous gases/vapors produced in fire are SO _x , when decomposed. | | | |
| Hazardous Polymerization | May Occur | | Conditions to Avoid |
| | Will Not Occur | X | N/A |

Section VI - Health Hazard Data

| | | | |
|---|--|------------------------------------|-------------------------------------|
| Route(s) of Entry: | Inhalation? Yes | Skin? Yes | Ingestion? No |
| Health Hazards (Acute and Chronic) Possible irritation of eyes, skin and mucous membranes of respiratory system. Prolonged inhalation may cause fibrosis/chronic bronchitis, silicosis. Silicosis is chronic disease characterized by pulmonary fibrosis and formation of silicon-containing scar tissue in the lungs. Symptoms include coughing, dyspnea, wheezing, and nonspecific respiratory ailments. | | | |
| Carcinogenicity: Crystalline Silica Quartz (SiO ₂) | NTP? known human carcinogen Yes | IARC Monographs? Group 1 | OSHA Regulated? Yes No |
| Signs and Symptoms of Exposure Possible irritation of eyes and/or skin. Silicosis and potentially lung tumors from exposure to crystalline silica. | | | |
| Medical Conditions Generally Aggravated by Exposure Respiratory diseases. Pre-existing diseases of the lung. | | | |
| Emergency and First Aid Procedures Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing difficult, give oxygen. Call Physician. Skin Contact: Compound not likely to be hazardous by skin contact, but cleansing the skin after use is advisable. Eye Contact: Immediately flush with water for minimum of 15 min. Call a physician. | | | |
| Toxicological Information Crystalline Silica: Eye contact may initially include irritation with discomfort, tearing, or blurring of vision. In animal studies, lung tumors were observed in rats exposed for up to 2 years by inhalation to 12.4 or 51.6 mg/m ³ quartz. Pulmonary fibrosis, emphysema, and lung tumors were also observed in rats exposed to quartz by intratracheal instillation. | | | |

Section VII - Precautions for Safe Handling and Use

| |
|---|
| <p>Steps to Be Taken in Case Material is Released or Spilled Recover undamaged and minimally contaminated material for reuse and reclamation. Shovel or sweep up.</p> |
| <p>Waste Disposal Method In accordance with applicable Federal, State and local regulations. Do not flush to surface water or sanitary sewer system. Reuse and reclaim where feasible.</p> |
| <p>Precautions to Be taken in Handling and Storing Store in accordance with National Fire Protection Assoc. recommendations. Avoid breathing dust. Avoid contact with eyes, skin or clothing. Wash thoroughly after handling. Wash clothes after use.</p> |
| <p>Other Precautions Avoid generating dusty conditions.</p> |

Section VIII - Control Measures

| | | |
|---|--|--------------------------------|
| <p>Respiratory Protection (<i>Specify Type</i>) NIOSH/MSHA approved air purifying respirator with a dust/mist cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (e.g., 3 mg/m³, respirable particles; 10 mg/m³, inhalable particles).</p> | | |
| <p>Ventilation Keep area well ventilated.</p> | <p>Local Exhaust N/A</p> | <p>Special N/A</p> |
| | <p>Mechanical (<i>General</i>) N/A</p> | <p>Other N/A</p> |
| <p>Protective Gloves Leather gloves to prevent abrasions.</p> | <p>Eye Protection Safety glasses.</p> | |
| <p>Other Protective Clothing or Equipment Sufficient protective clothing to minimize skin exposure. Launder contaminated clothing before reuse.</p> | | |
| <p>Work/Hygienic Practices Wash thoroughly with soap and water to avoid prolonged skin contact.</p> | | |

Section IX - Special Precautions

| |
|--|
| <p>Precautions to be taken in Handling and Storing N/A</p> |
| <p>Other Precautions N/A</p> |

Section X – Transportation, Regulatory, & Other Information

| |
|--|
| DOT: Not required. |
| ICAO/IMO: Not restricted. |
| OSHA Hazard Determination This material is hazardous as defined by OSHA’s Hazard Communication Standard, 29 CFR 1910.1200. |
| CERCLA/Superfund This material is not known to contain any ingredient(s) subject to this act. |
| SARA, Title III, 302/304 This material is not known to contain extremely hazardous substances. |
| SARA, Tital III, 311/312 Acute: Yes Chronic: Yes Fire: No Reactivity: No Pressure: No |
| SARA, Title III, 313 This material is not known to contain any chemical(s) at a level of 1.0% or greater (0.1% for carcinogens) on the list. |
| TSCA Material and/or components are listed in the TSCA Inventory of Chemical Substances, 40 CFR 710. |
| RCRA This material, when discarded or disposed of, is not specifically listed as a hazardous waste in Federal regulations. It could become a hazardous waste if it is mixed with or comes in contact with a listed hazardous waste. If it is hazardous waste, regulations at 40 CFR 262-266 and 268 may apply. |
| Clean Water Act This material is not known to contain hazardous substances in sufficient quantity to make it subject to Clean Water Act regulations. |
| NFPA, NPCA-HMIS Ratings: Health – 1 Flammability – 0 Reactivity – 0 Personal Protection rating to be supplied by user depending on use conditions. |
| Product Use Embankment and stabilized base. |

Each MSDS must be reviewed for correctness and completeness every three years.

Reviewed by _____

Reviewed by _____

Review date _____

Review date _____