



# 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

<b>IDENTITY (As Used on Label and List)</b> Unhydrated Circulation Fluidized Bed Combustor Ash Unhydrated Bed Ash                               OPF90 - N Unhydrated Fly Ash                                 OPF70 - N	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.
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## Section I

<b>Manufacturer's Name</b> NISCO/LA Ash, Inc.	<b>Emergency Telephone Number</b> Transport Emergency (CHEMTREC) 1-800-424-5300 Medical Emergency 1-800-441-3637
<b>Address (Number, Street, City, State, and ZIP Code)</b> 3400 Houston River Road  Westlake, LA 70669	<b>Telephone Number for Information</b> <b>Plant</b> (337) 494-6125 <b>Product Information</b> (281) 293-5550
<b>MSDS Code:</b> COKC001	<b>Date Prepared/Revision Date</b> 3/26/1999/Rev. 12/18/2008  <b>Signature of Preparer (optional)</b>

## Section II - Hazard Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Calcium Oxide (CAS #1305-78-8)	5 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>	8-Hr. TWA	30-46
Anhydrite – Calcium Sulfate (CAS #7778-18-9) Total Dust Respirable Dust	15 mg/m <sup>3</sup> 5 mg/m <sup>3</sup>	10 mg/m <sup>3</sup> (containing no asbestos & <1% free silica)	8-Hr. TWA 8-Hr. TWA	38-61
Silicon Dioxide (Crystalline Silica) (CAS # 14808-60-7) Total Dust Respirable Dust	30 mg/m <sup>3</sup> / % SiO <sub>2</sub> +2 10 mg/m <sup>3</sup> / % SiO <sub>2</sub> +2	0.1 mg/m <sup>3</sup> Or See: Christobalite 14464-46-1, Silica, Fused 60676-86-0, Tridymite 15468-32-2, Tripoli 1317-95-9	8-Hr. TWA	<4.5
Magnesium Oxide (CAS #1309-48-4) Total Dust	15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	8-Hr. TWA	0.4-3.9

**REMARKS:** Remaining components are not known to be hazardous as defined by OSHA's Hazard Communication Standard. 29 CFR 1210.1200.

### Section III - Physical/Chemical Characteristics

<b>Boiling Point</b> N/A	N/A	<b>Specific Gravity (H<sub>2</sub>O = 1)</b> N/A	<b>pH</b>
<b>Vapor Pressure (mm Hg.)</b> <b>Vapor Density (AIR = 1)</b>	N/A	<b>Melting Point</b>	NA
<b>Bulk Density (Loose)</b>	Approx. 52/lb. cu. ft.	<b>Evaporation Rate (Butyl Acetate = 1)</b>	NA
<b>Solubility in Water</b> Insoluble			
<b>Appearance and Odor</b> Ashen Grey to White Dust; No Odor			

### Section IV - Fire and Explosion Hazard Data

<b>Flash Point (Method Used)</b> N/A	<b>Flammable Limits</b> Not a fire hazard under normal conditions.	<b>LEL</b> N/A	<b>UEL</b> N/A
<b>Extinguishing Media</b> Use media appropriate for surrounding material.			
<b>Special Fire Fighting Procedures</b> Wear self-contained breathing apparatus.			
<b>Unusual Fire and Explosion Hazards</b> N/A			

### Section V - Reactivity Data

<b>Stability</b>	<b>Unstable</b>		<b>Conditions to Avoid</b>
	<b>Stable</b>	X	Skin contact and moisture
<b>Incompatibility (Materials to Avoid)</b> None reasonably foreseeable. Reacts oxothermically to release heat when water is added.			
<b>Hazardous Decomposition or Byproducts</b> N/A			
<b>Hazardous Polymerization</b>	<b>May Occur</b>		<b>Conditions to Avoid</b>
	<b>Will Not Occur</b>	X	N/A

## Section VI - Health Hazard Data

<b>Route(s) of Entry:</b>	<b>Inhalation?</b> Yes	<b>Skin?</b> Yes	<b>Ingestion?</b> No
<b>Health Hazards (<i>Acute and Chronic</i>)</b> 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.			
<b>Carcinogenicity:</b> Crystalline silica	<b>NTP?</b> known human carcinogen	<b>IARC Monographs?</b> Group 1	<b>OSHA Regulated?</b> Yes
<b>Signs and Symptoms of Exposure</b> Possible irritation of eyes and/or skin. Silicosis and potentially lung tumors from exposure to crystalline silica.			
<b>Medical Conditions Generally Aggravated by Exposure</b> Respiratory diseases. Pre-existing diseases of the lung.			
<b>Emergency and First Aid Procedures</b> Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing difficult, give oxygen. Call Physician. Skin Contact: Flush skin with water for at least 15 min., while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Call a physician. Eye Contact: Immediately flush with water for minimum of 15 min. Call a physician.			
<b>Toxicological Information</b> Crystalline Silica: 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 <sup>3</sup> quartz. Pulmonary fibrosis, emphysema, and lung tumors were also observed in rats exposed to quartz by intratracheal instillation.			
<b>Ecological Information</b> No specific aquatic data available for this product.			

## Section VII - Precautions for Safe Handling and Use

<b>Steps to Be Taken in Case Material is Released or Spilled</b> Recover undamaged and minimally contaminated material for reuse and reclamation. Shovel or sweep up.
<b>Waste Disposal Method</b> In accordance with applicable Federal, State and local regulations. Do not flush to surface water or sanitary sewer system. Reuse and reclaim where feasible.
<b>Precautions to Be taken in Handling and Storing</b> 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.
<b>Other Precautions</b> Avoid generating dusty conditions.

**Section VIII - Control Measures**

<p><b>Respiratory Protection (<i>Specify Type</i>)</b>          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/m<sup>3</sup>, respirable particles; 10 mg/m<sup>3</sup>, inhalable particles). Protection provided by air-purifying respirators is limited. Use a positive pressure air-supplied respirator if levels are not known or any other circumstances where air-purifying respirators may not provide adequate protection.</p>		
<p><b>Ventilation</b>          Keep area well ventilated.</p>	<p><b>Local Exhaust</b>          N/A</p>	<p><b>Special</b>          N/A</p>
	<p><b>Mechanical (<i>General</i>)</b>          N/A</p>	<p><b>Other</b>          N/A</p>
<p><b>Protective Gloves</b>          Wear impervious gloves.</p>	<p><b>Eye Protection</b>          Use close fitting goggles.</p>	
<p><b>Other Protective Clothing or Equipment</b>          Sufficient protective clothing to minimize skin exposure. Launder contaminated clothing before reuse.</p>		
<p><b>Work/Hygienic Practices</b>          Wash thoroughly with soap and water to avoid prolonged skin contact.</p>		

**Section IX - Special Precautions**

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

**Section X – Transportation & Regulatory Information**

<p><b>DOT:</b> Not required.</p>
<p><b>ICAO/IMO:</b> Not restricted.</p>
<p><b>OSHA Hazard Determination</b>          This material is hazardous as defined by OSHA’s Hazard Communication Standard, 29 CFR 1910.1200.</p>
<p><b>CERCLA/Superfund</b>          This material is not known to contain any ingredient(s) subject to this act.</p>
<p><b>SARA, Title III, 302/304</b>          This material is not known to contain extremely hazardous substances.</p>
<p><b>SARA, Tital III, 311/312</b>          Acute: Yes          Chronic: Yes          Fire: No          Reactivity: No          Pressure: No</p>
<p><b>SARA, Title III, 313</b>          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.</p>

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

Reviewed by \_\_\_\_\_

Reviewed by \_\_\_\_\_

Review date \_\_\_\_\_

Review date \_\_\_\_\_