

MATERIAL SAFETY DATA SHEET

Section 1: Product/Company Information

Identity: Fly ash

Mfg. Name: Elsons Corporation
Office # D-4, Plot No.59-C, 24th Tauheed
Commercial Street, DHA Phase V, Karachi, Pakistan

Section 2: Composition Information

Typical chemical composition:

Component	CAS Number	Percent of Weight
Fly Ash	68131-74-8	<100%
Crystalline Silica	14808-60-7	0-10%

Note: Fly ash is a byproduct from the combustion of coal. Trace chemicals may be detected during chemical analysis.

This product contains free silica. Inhalation of dust may be harmful to your health. ACGIH has recommended a PEL of 0.05 mg/m³ as determined by a full shift sample up to 10 hours working day, 40 hours per week.

H.M.I.S. ratings: Health – 1 Flammability – 0 Reactivity - 0

Section 3: Hazard Identification

Potential Health Effects: Potential health effects may vary depending upon the duration and degree of exposure. To reduce or eliminate health hazards associated with this product, use exposure controls or personal protection methods as described in Section 12.

Eye Contact: (Acute/Chronic) Exposure to airborne dust may cause immediate or delayed irritation or inflammation of the cornea.

Inhalation: (Acute) Breathing dust may cause nose, throat or lung irritation.

Skin Contact: Ash may cause dry skin, discomfort and irritation.

Ingestion: Do not ingest Ash. Although ingestion of small quantities of ash is not known to be harmful, large quantities can cause distress to the digestive tract.

Section 3: Hazard Identification (continued)

Inhalation (chronic): Risk of injury depends on duration and level of exposure.

Silicosis: This product contains crystalline silica. Prolonged or repeated inhalation of respirable crystalline silica from this product can cause silicosis, a seriously disabling and fatal lung disease.

Carcinogenicity: Ash is not listed as a carcinogen by IARC; however, ash contains trace amounts of crystalline silica, which is classified as a known human carcinogen.

Section 4: Emergency and First Aid

Eyes: Immediately flush eye thoroughly with water. Get medical attention if irritation persists.

Skin: Wash with cool water and mild skin detergent. Seek medical attention for rashes or irritation.

Inhalation: Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing and other symptoms do not subside.

Ingestion: Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician if discomfort is experienced.

Section 6: Accidental Release Measures

Use clean-up methods that do not disperse dust into the air. Avoid inhalation of dust and contact with eyes. Use exposure control and personal protection methods as described in Section 12.

Section 7: Physical/Chemical Data

Boiling Point:	>1000 ⁰ C
Specific Gravity (H₂O = 1.0):	2.0 – 2.9
Vapor Pressure:	Not applicable
Solubility in Water:	Slightly (< 5%)
Appearance:	Gray/black or brown/tan powder
Odor:	No Odor
Physical State:	Solid
Vapor Density:	Not applicable
pH (in water):	4-12

Section 8: Fire and Explosion Hazard Data

Flash Point: None

Auto ignition Temperature: Not combustible

Flammable Limits: N/A

Extinguishing Media: Not Combustible

Hazardous Combustion Products: None

Lower Explosive Limit: None

Upper Explosive Limit: None

Special Fire Fighting Procedures: None

Unusual Fire and Explosion Hazards: None

Section 9: Stability and Reactivity Data

Stability:

Product is stable

Incompatibility (Materials to Avoid):

Acids, ammonium salts and aluminum metal.

Hazardous Decomposition:

Will not occur

Hazardous Polymerization:

Will not occur

Section 10: Handling and Storage

Handle and store in a manner so that airborne dust does not exceed applicable exposure limits. Use adequate ventilation and dust collection. Use exposure control and personal protection methods as described in Section 12.

Section 11: Toxicological Information

Conditions aggravated by exposure: Eye disease, Skin disorders and Chronic Respiratory conditions.

Section 12: Exposure Control/Personal Protection

Respiratory Protection: Use local exhaust or general dilution ventilation to control dust levels below applicable exposure limits. Minimize dispersal of dust into the air. Use appropriate NIOSH approved respiratory protection for respirable crystalline silica.

Eye Protection: Wear safety glasses with side shields or goggles to avoid contact with the eyes. In extremely dusty environments and unpredictable environments, wear tight-fitting unvented or indirectly vented goggles to avoid eye irritation or injury.

Skin Protection: Wear gloves, boot covers and protective clothing impervious to water to prevent skin contact.

Section 13: Disposal Considerations

All disposal methods must be in accordance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterization and compliance with applicable laws are the responsibility solely of the waste generator.

Section 14: Transportation Data

This product is not classified as hazardous under U.S. DOT or TDG regulations.

Section 15: Other Regulatory Information

**Status under US OSHA Hazard
Communications Rule 29 CFR 1910.1200:**

Silica sand is considered a hazardous chemical under this regulation and should be included in the employer's hazard communication program.

**Status under CERCLA/Superfund, 40 CFR
117 and 302:**

Not listed

**Hazard Category under SARA (Title III),
Sections 311 and 312:**

Silica sand qualifies as a hazardous substance with delayed health effects.

Status under SARA (Title III), Section 313:

Not subject to reporting requirements under Section 313

Section 16: Other Information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. It is the user's obligation to determine the conditions of safe use of this product.