L. M. International

Product Brochure

Fly Ash

Why Use Fly Ash?

Cement production is a major source of CO_2. By using Fly Ash instead of OPC, you can:

-Cut down carbon emissions by up to 80%
-Use less cement, or even go 100% OPC-free
-Recycle industrial byproducts that would otherwise go to waste

Strong, Durable and Eco-Friendly

Our Fly Ash and Ultra-Fine Fly Ash can be used to create concrete mixes that are:

- Just as strong, or stronger, than traditional mixes
- More durable over time
- Better for the environment

In many cases, you can produce high-performance blocks, precast products or concrete structures without using any OPC at all. All you need is Fly Ash, aggregates and the right activators.

Characteristics	Specifications
Silicon Dioxide (SIO2) + Aluminium Oxide (Al203) + Iron (FE203) Min %	89.61
Silicon Dioxide (SIO2) by % Mass Min	51.90
Aluminium as Al203	29.87
Iron as FE203	7.84
Sulphur Trioxide (SO3) Max%	0.80
Loss On Ignition Max %	0.95
Available Alkalis as Sodium Oxide (Na2O) Max %	0.38
Moisture Content Max %	0.09
Finenes % retained on 45 Micron in wet-sieving Max %	14.8
Magnesium Oxide (MgO) Max %	2.73
Chloride as Cl	0.011
Calcium as CAO	4.02

Super Fly Ash

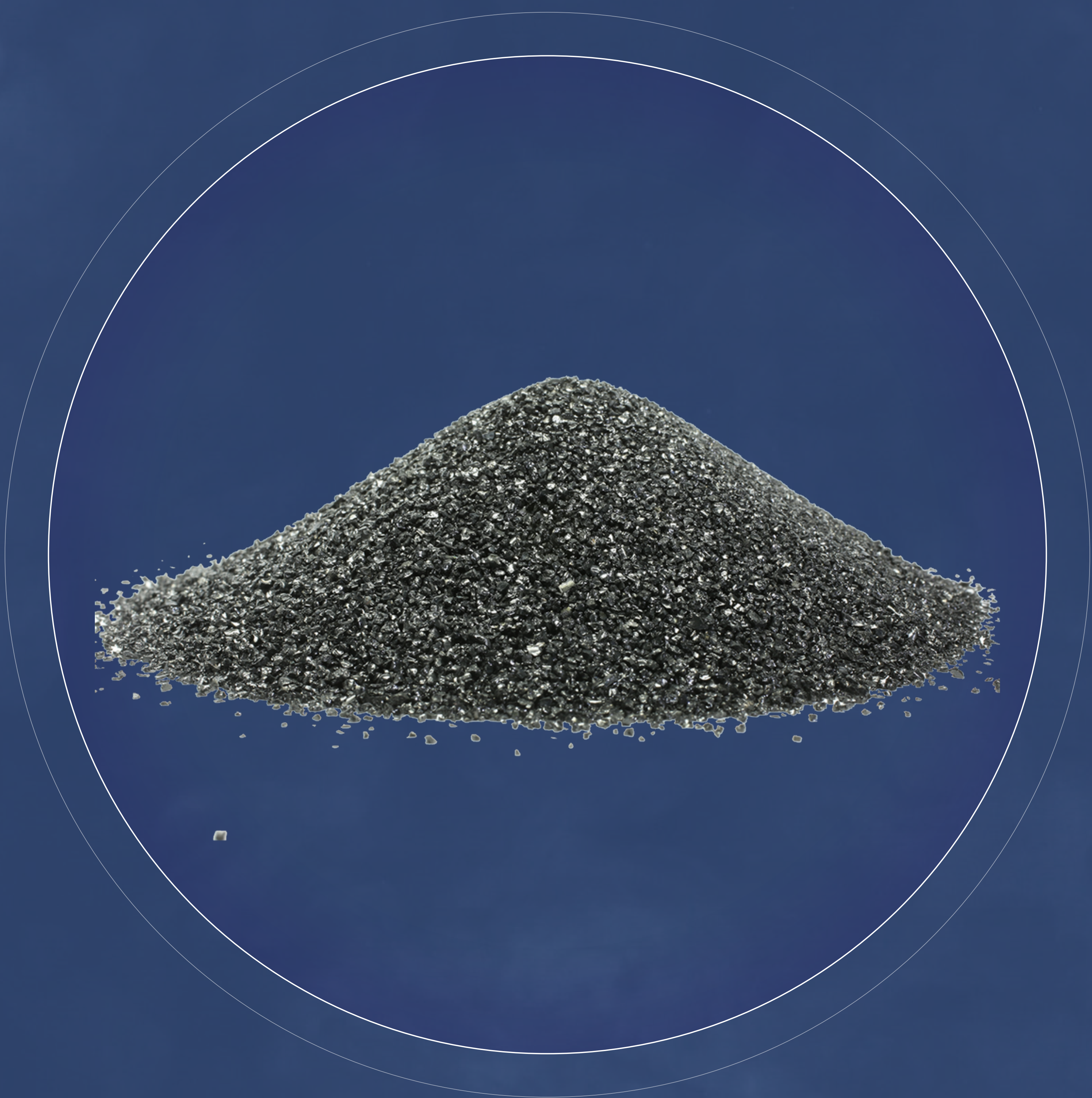
A high-purity form of fly ash designed for superior concrete performance. Stronger, more durable, and eco-friendly—Super Fly Ash elevates construction to the next level. Super Fly Ash is a refined version of standard fly ash, offering higher purity and consistency. Used in high-strength concrete, it enhances durability, reduces water consumption, and contributes to sustainable construction by minimising carbon emissions from cement production.

Characteristics	Specifications
Silicon Dioxide (SIO2) + Aluminium Oxide (Al2O3) + Iron (FE2O3) Min %	96.66
Silicon Dioxide (SIO2) by % Mass Min	62.05
Aluminium as Al2O3	27.15
Iron as FE2O3	7.46
Sulphur Trioxide (SO3) Max%	0.04
Loss On Ignition Max %	0.19
Available Alkalis as Sodium Oxide (Na2O) Max %	0.11
Moisture Content Max %	0.09
Fineness % retained on 45 Micron in wet-sieving Max %	0.88
Magnesium Oxide (MgO) Max %	0.90
Chloride as Cl	0.010
Calcium as CAO	2.04

Copper Slag

Copper Slag. A Tough Alternative to Sand
Copper Slag is a dense, hard and angular material that works well as a sand replacement or abrasive grit.

Benefits:
- Increases concrete strength and improves surface finish
- More durable than river sand in heavy-use areas
- Supports sustainable construction by recycling industrial waste
- Excellent for roads, concrete, landfills and abrasive blasting



Caustic Soda Flakes

A high-purity alkaline compound used across industries for cleaning, chemical manufacturing, and water treatment. Caustic Soda Flakes, also known as sodium hydroxide, are a strong alkali widely used in industrial applications. Its high solubility and reactivity make it a key ingredient in chemical production, textiles, and water treatment processes.

Characteristics	Specifications
Appearance	Milky Whiteflakes
NaOH (%w/w)	99
Na2CO3 (%w/w)	0.12
Iron as Fe (ppm)	3.55
Nacl (ppm)	38
Nickel (ppm)	1.00

Ethanol

(96% & 99.9%)

A high-grade ethanol solution used in pharmaceuticals, cosmetics, fuel, and industrial applications. Ethanol, available in 96% and 99.9% purity, is an essential solvent and disinfectant used in industries ranging from pharmaceuticals to biofuels. Known for its high volatility and effectiveness, ethanol is a sustainable alternative for chemical formulations and energy solutions.

Typical Properties	Specification
Purity (Ethanol)	>96%
Physical state	Liquid
Appearance	Colourless
Odour	Slight alcohol-like
pH	7.0 at 10 g/l at 20 °C
Melting/Freezing point	-117 °C
Boiling point/range	78 °C
Flash point	17 °C
Vapour pressure (50 °C)	78.7 hPa
Viscosity (20 °C)	1.2mPas
Relative density	0.79
Density, at 20°C	0.805-0.812

Micro Silica

Micro Silica. For High-Strength Concrete
Micro Silica is an ultra-fine material that fills the micro-voids in concrete, making it stronger, denser and longer-lasting.

Benefits:
- Boosts compressive strength
- Reduces water absorption and cracking
- Improves chemical and corrosion resistance
- Ideal for precast structures, bridges, basements and marine applications

Index Items	Specifications
SiO_2 %	90
H_2O (Moisture) %	0.56
Loss of Ignition (L.O.I) %	6
Accelerated Pozzolanic Strength Activity Index (7 days) %	113
Specific Surface	20.1 m2/g
Percent Retained on 45 µm %	1.3
Bulk Density	656 KG/m3
Conclusion	Complies with requirements of ASTM C 1240 standard

Contact Us:
info@lminternationaltrading.com