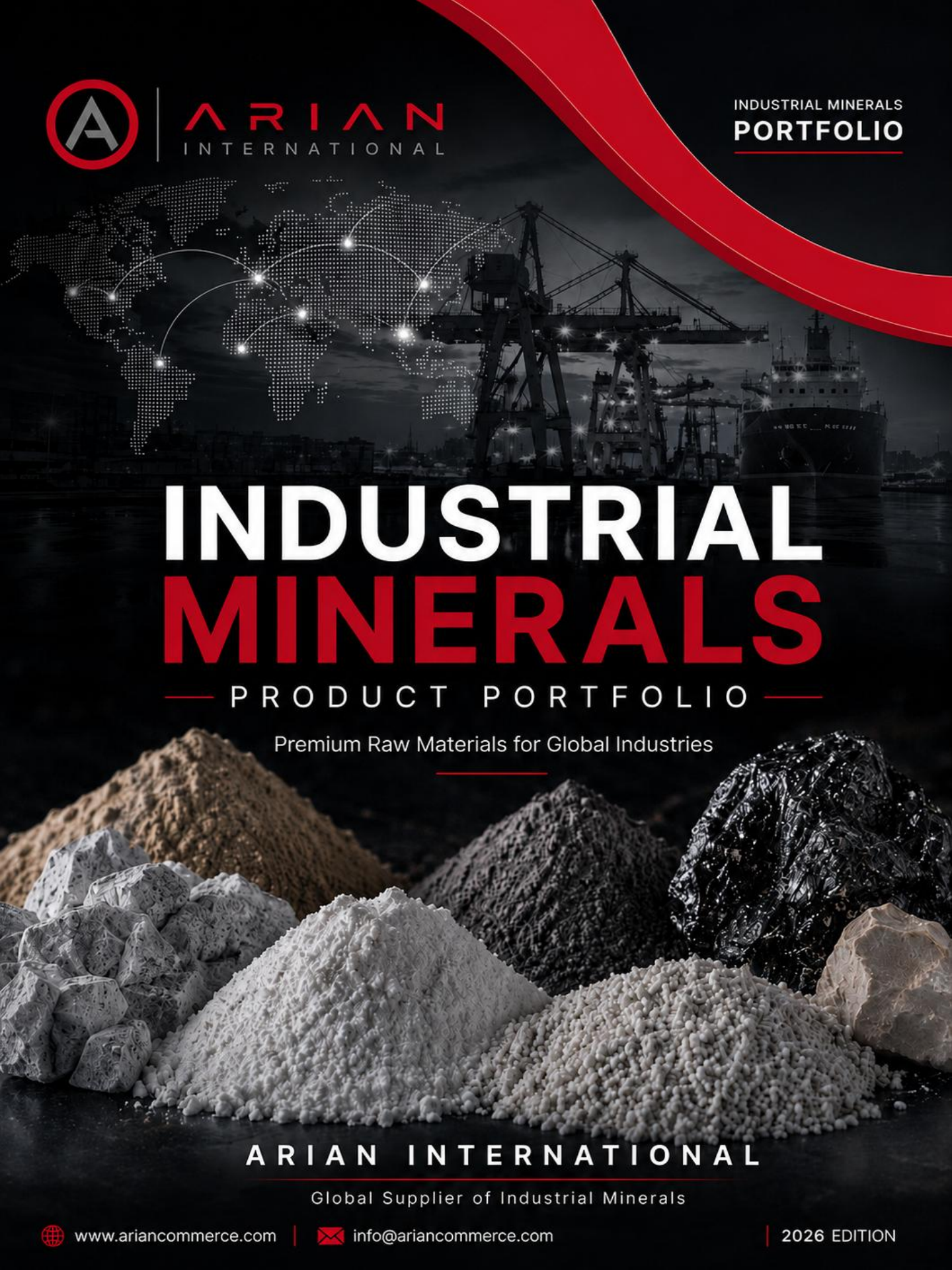




ARIAN
INTERNATIONAL

INDUSTRIAL MINERALS
PORTFOLIO



INDUSTRIAL MINERALS

— PRODUCT PORTFOLIO —

Premium Raw Materials for Global Industries



ARIAN INTERNATIONAL

Global Supplier of Industrial Minerals



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2026 EDITION



ARIAN
INTERNATIONAL

INDUSTRIAL MINERALS
PORTFOLIO

ABOUT ARIAN INTERNATIONAL

ARIAN INTERNATIONAL is a global trading company specializing in the supply and export of industrial minerals and raw materials for diverse industries worldwide.

With an extensive supplier network and direct access to premium mineral resources, **ARIAN** provides reliable sourcing solutions tailored to the requirements of international customers.

Our commitment to quality, consistency, and long-term partnerships enables us to serve clients across multiple industrial sectors.



WHY ARIAN?

- ✓ Reliable Supply Chain
- ✓ Consistent Quality
- ✓ Competitive Pricing
- ✓ Global Export Experience
- ✓ Customized Specifications
- ✓ Fast Response & Support



GLOBAL REACH

Serving clients in 5 continents with strong logistics network.



EXPORT FOCUS

Exporting premium minerals to over 30 countries worldwide.



PREMIUM SOURCES

Access to high-quality mines and reliable suppliers.



INDUSTRIAL APPLICATIONS

Supplying raw materials for a wide range of industries.



QUALITY ASSURANCE

Strict quality control and consistent product standards.

OUR PRODUCT PORTFOLIO

01 GILSONITE



02 KAOLIN



03 BENTONITE



04 LIMESTONE



05 CALCIUM CARBONATE



06 SILICA



07 SODIC - POTASSIC FELDSPAR



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09 DOLOMITE



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15 FERROSILICON



16 BARITE



17 BENTONITE FOOD GRADE



18 GYPSUM STONE



19 GYPSUM PLASTER



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01 GILSONITE



PRODUCT DESCRIPTION

Gilsonite (Natural Asphalt, Natural Bitumen, Uintahite) is a naturally occurring solid hydrocarbon resin with high carbon content and exceptional compatibility with hydrocarbon systems. It is widely used in asphalt modification, drilling fluids, coatings, foundry, and waterproofing applications. Available in lump, granular, and micronized powder forms with various ash contents and particle sizes.



CHEMICAL COMPOSITION

PARAMETER		ASH 5-10%	ASH 10-15%	ASH 15-20%
Ash Content	wt%	5 - 10	10 - 15	15 - 20
Carbon (C)	wt%	85 - 90	70 - 75	68 - 72
Sulfur (S)	wt%	3.5 - 4	4 - 6	5 - 6
Hydrogen (H)	wt%	6 - 8	6 - 8	6 - 7
Nitrogen (N)	wt%	0.7 - 0.9	0.7 - 0.9	0.7 - 0.9
Softening Point	°C	170 - 230	170 - 230	170 - 230
Volatile Matter	wt%	50 - 70	50 - 70	45 - 65
Fixed Carbon	wt%	20 - 35	20 - 35	20 - 35
Specific Gravity (25°C)	g/cm ³	1.02 - 1.10	1.02 - 1.15	1.05 - 1.20
Moisture	wt%	< 3	< 3	< 3

Chemical composition may vary slightly based on origin and grade.



PHYSICAL PROPERTIES

PROPERTY	TYPICAL RANGE
Appearance	Black, shiny, lustrous solid
Specific Gravity (25°C)	1.02 - 1.20 g/cm ³
Softening Point	170 - 230 °C
Volatile Matter	45 - 70 %
Fixed Carbon	20 - 35 %
Moisture	≤ 3 %
Solubility	Soluble in aromatic and aliphatic solvents
Odor	Slight hydrocarbon odor
Flash Point	> 250 °C
pH (10% Slurry)	7 - 9



APPLICATIONS



ASPHALT & ROAD CONSTRUCTION
Modifier to improve durability, rutting resistance, and softening point of asphalt binders and mixes.



INKS & PAINTS
Black pigment and resin extender in printing inks, coatings, and paints.



OIL & GAS DRILLING
Used as a loss circulation material (LCM) and shale stabilizer in water- and oil-based drilling fluids.



FOUNDRY & METALLURGY
Binder in foundry sands and additive in metallurgical coke production.



ADHESIVES & SEALANTS
Component in industrial adhesives, mastics, and waterproofing compounds.



WATERPROOFING COMPOUNDS
Used in waterproofing membranes, roofing, and protective coatings.



AVAILABLE FORMS & PARTICLE SIZES



LUMP
10 - 150 mm



GRANULAR
2 - 10 mm



POWDER
30 MESH



POWDER
100 MESH



POWDER
200 MESH



POWDER
325 MESH



POWDER
400 MESH

Other sizes available upon request.



PACKAGING

- 25 kg Bags (palletized)
- 1000 kg Jumbo Bag
- 1300 kg Jumbo Bag



ROAD CONSTRUCTION



OIL & GAS DRILLING



PAINTS & COATINGS



FOUNDRY INDUSTRY



ADHESIVES



WATERPROOFING



02

KAOLIN



PRODUCT DESCRIPTION

Kaolin is a naturally occurring hydrated aluminum silicate ($\text{Al}_2\text{Si}_2\text{O}_5(\text{OH})_4$) with a fine particle size and excellent whiteness, brightness, and plasticity. It is widely used in ceramics, paper, paints, coatings, rubber, plastics, and various industrial applications.

CHEMICAL COMPOSITION
(TYPICAL ANALYSIS)

COMPONENT	wt%
SiO ₂	46.0 – 55.0
Al ₂ O ₃	34.0 – 40.0
Fe ₂ O ₃	0.5 – 1.5
TiO ₂	0.2 – 0.6
CaO	0.1 – 0.6
MgO	0.1 – 0.4
K ₂ O	0.5 – 1.5
Na ₂ O	0.1 – 0.3
Loss on Ignition (LOI)	12.0 – 14.0
Moisture	≤ 1.0
Whiteness	80 – 92

Chemical composition may vary slightly based on origin and grade.



PHYSICAL PROPERTIES

PROPERTY	UNIT	TYPICAL RANGE
Appearance	–	White to off-white powder / lumps
Specific Gravity	g/cm ³	2.50 – 2.65
Bulk Density	g/cm ³	0.45 – 0.65
Moisture Content	%	≤ 1.0
pH (10% Slurry)	–	6.0 – 7.0
Brightness	%	≥ 80
Whiteness	%	80 – 92
Oil Absorption	g/100g	35 – 60
Particle Size	μm	As per customer requirement
Color	–	White to off-white
Solubility in Water	%	≤ 0.5



APPLICATIONS



CERAMIC INDUSTRY

Used in ceramic bodies, glazes, and sanitaryware for plasticity, strength, and whiteness.



PAPER INDUSTRY

Used as a filler and coating pigment to improve brightness, smoothness, and opacity.



PAINTS & COATINGS

Enhances opacity, brightness, and rheology in paints, coatings, and water-based systems.



RUBBER & PLASTICS

Improves mechanical properties, dimensional stability, and brightness.



COSMETICS & PERSONAL CARE

Used in talc-free powders, creams, and personal care formulations.



OTHER INDUSTRIES

Used in adhesives, sealants, agriculture, textiles, and refractories.



AVAILABLE FORMS & PARTICLE SIZES



LUMP
10 – 50 mm



GRANULAR
2 – 10 mm



100 MESH
150 μm



200 MESH
75 μm



325 MESH
45 μm



400 MESH
38 μm

Other sizes and specifications available upon request.



PACKAGING

- 25 kg Bags (palletized)
- 1000 kg Jumbo Bag
- 1300 kg Jumbo Bag



CERAMIC INDUSTRY



PAPER INDUSTRY



PAINTS & COATINGS



RUBBER & PLASTICS



COSMETICS



ADHESIVES



03 BENTONITE



PRODUCT DESCRIPTION

Natural Bentonite is a clay mineral primarily composed of Montmorillonite with exceptional swelling capacity, adsorption ability, and rheological control properties. It is widely used in drilling fluids, foundry binders, civil engineering barriers, detergents, cosmetics, and agriculture.



CHEMICAL COMPOSITION (XRF ANALYSIS)

COMPONENT	wt%
SiO ₂	70.25
Al ₂ O ₃	12.14
Fe ₂ O ₃	5.00
MgO	2.59
CaO	2.58
Na ₂ O	3.78
K ₂ O	0.55
TiO ₂	0.08
MnO	0.03
L.O.I (Loss on Ignition)	8.50



PHYSICAL & MINERALOGICAL PROPERTIES

PROPERTY	SPECIFICATION
Appearance	Light brown to cream powder
pH (10% slurry)	8.5 – 9.5
Swelling Index	≥ 30 ml / 2 g
Moisture Content	≤ 12%
Bulk Density	0.8 – 1.0 g/cm ³
Montmorillonite Content	≥ 75%
Exchangeable Cations	Na ⁺ / Ca ²⁺



APPLICATIONS



DRILLING FLUIDS

Used as viscosifier and fluid-loss control agent in water and oil-based drilling fluids.



FOUNDRY INDUSTRY

Used as a binder for molding sands and core making.



CIVIL ENGINEERING

Used in sealing and lining applications such as geosynthetic clay liners.



DETERGENTS & COSMETICS

Used as absorbent and rheology modifier in various formulations.



ANIMAL FEED & AGRICULTURE

Used as pellet binder, carrier and toxin adsorbent in animal feed and agriculture.



AVAILABLE FORMS



LUMP
BENTONITE



GRANULAR
BENTONITE



POWDER
BENTONITE



PACKAGING

- 25 kg Bags
- 1000 kg Jumbo Bags
- 1300 kg Jumbo Bags



DRILLING FLUIDS



FOUNDRY



CIVIL ENGINEERING



COSMETICS



AGRICULTURE





04 LIMESTONE



PRODUCT DESCRIPTION

Limestone is a naturally occurring sedimentary rock composed primarily of calcium carbonate (CaCO_3). It is widely used in construction, agriculture, metallurgical, and industrial applications due to its high purity, consistency, and excellent chemical properties.



CHEMICAL COMPOSITION (XRF ANALYSIS)

COMPONENT	wt%
CaCO_3	95.00 – 98.00
SiO_2	0.50 – 2.00
Al_2O_3	0.20 – 0.80
Fe_2O_3	0.10 – 0.40
MgO	0.30 – 1.50
K_2O	0.01 – 0.05
Na_2O	0.01 – 0.05
SO_3	0.05 – 0.20
L.O.I (Loss on Ignition)	42.00 – 44.00



PHYSICAL PROPERTIES

PROPERTY	UNIT	TYPICAL RANGE
Appearance	—	White to light gray crystalline powder
Whiteness	%	85 – 95
Bulk Density	g/cm^3	0.9 – 1.3
Specific Gravity	g/cm^3	2.70 – 2.75
Moisture Content	%	≤ 1.0
Hardness (Mohs)	—	3
pH (10% Slurry)	—	8.0 – 9.0
Solubility in Water	%	0.10 – 0.25
Particle Size	—	As per customer requirement



APPLICATIONS



CONSTRUCTION INDUSTRY

Used in cement, concrete, asphalt, road base, and as aggregate in construction materials.



AGRICULTURE

Soil conditioner to neutralize acidity and improve soil structure; source of calcium for plants.



METALLURGICAL INDUSTRY

Used as flux in steelmaking and non-ferrous smelting processes.



CHEMICAL INDUSTRY

Raw material for lime, calcium carbide, soda ash, and other chemical products.



ENVIRONMENTAL APPLICATIONS

Used in flue gas desulfurization, water treatment, and pH control.



AVAILABLE FORMS & PARTICLE SIZES



LUMP
10 – 50 mm



GRANULAR
2 – 10 mm



30 MESH
600 μm



100 MESH
150 μm



200 MESH
75 μm

Other sizes available upon request.



PACKAGING

- 25 kg Bags (palletized)
- 1000 kg Jumbo Bags
- 1300 kg Jumbo Bags





05 CALCIUM CARBONATE



PRODUCT DESCRIPTION

Calcium Carbonate (CaCO_3) is a white, odorless, and tasteless mineral widely used as a functional filler in various industries. It is available in precipitated (PCC) and ground (GCC) forms with different particle sizes to meet diverse industrial requirements.



CHEMICAL COMPOSITION (XRF ANALYSIS)

COMPONENT	wt%
CaCO_3	95.00 – 98.00
SiO_2	0.20 – 1.00
Al_2O_3	0.10 – 0.50
Fe_2O_3	0.05 – 0.20
MgO	0.10 – 0.50
K_2O	0.01 – 0.05
Na_2O	0.01 – 0.05
SO_3	0.01 – 0.05
L.O.I (Loss on Ignition)	43.00 – 44.50



PHYSICAL PROPERTIES

PROPERTY	UNIT	TYPICAL RANGE
Appearance	—	White fine powder
Whiteness	%	90 – 97
Assay (CaCO_3)	%	95 – 98
Moisture Content	%	≤ 0.5
Bulk Density	g/cm^3	0.6 – 1.0
Oil Absorption	g/100g	15 – 25
pH (10% Slurry)	—	8.5 – 9.5
Specific Gravity	g/cm^3	2.70 – 2.75
Hardness (Mohs)	—	3
Particle Size (D50)	μm	1 – 10 (GCC) 0.2 – 2 (PCC)



APPLICATIONS



PAINTS & COATINGS

Used as an extender and filler to improve opacity, brightness, and durability.



PLASTICS & RUBBER

Enhances rigidity, dimensional stability, and surface finish in plastic and rubber products.



PAPER INDUSTRY

Improves brightness, smoothness, and printability; reduces production costs.



CONSTRUCTION MATERIALS

Used in putty, tile adhesive, sealants, and cement products as a filler.



PHARMACEUTICAL & FOOD

Used as an excipient and anti-caking agent in pharmaceutical and food applications (food grade).



AGRICULTURE

Soil conditioner and source of calcium for plant nutrition.



AVAILABLE FORMS & PARTICLE SIZES



POWDER
0 – 1 μm
(PCC)



POWDER
1 – 5 μm
(PCC)



POWDER
5 – 10 μm
(GCC)



POWDER
10 – 20 μm
(GCC)



POWDER
20 – 75 μm
(GCC)



GRANULAR
75 – 200 μm
(GCC)

Other particle sizes available upon request.



PACKAGING

- 25 kg Bags (palletized)
- 1000 kg Jumbo Bags
- 1300 kg Jumbo Bags



PAINTS & COATINGS



PLASTICS & RUBBER



PAPER INDUSTRY



CONSTRUCTION



PHARMACEUTICALS



AGRICULTURE

06 SILICA



PRODUCT DESCRIPTION

Silica (Silicon Dioxide - SiO_2) is a naturally occurring mineral known for its high hardness, chemical inertness, and thermal stability. It is widely used in glass, ceramics, foundry, construction, paints, polymers, and filtration industries.



CHEMICAL COMPOSITION (XRF ANALYSIS)

COMPONENT	wt%
SiO_2	98.0 - 99.5
Al_2O_3	0.20 - 0.60
Fe_2O_3	0.05 - 0.20
CaO	0.05 - 0.20
MgO	0.05 - 0.15
Na_2O	0.05 - 0.15
K_2O	0.05 - 0.20
TiO_2	0.01 - 0.05
LOI (Loss on Ignition)	0.10 - 0.50



PHYSICAL PROPERTIES

PROPERTY	UNIT	TYPICAL RANGE
Appearance	—	White crystalline powder / granules
SiO_2 Content	%	≥ 98
Hardness (Mohs)	—	7
Bulk Density	g/cm^3	1.4 - 1.7
Specific Gravity	g/cm^3	2.60 - 2.65
Moisture Content	%	≤ 0.5
Melting Point	$^{\circ}\text{C}$	1710
Refractoriness	$^{\circ}\text{C}$	≥ 1650
pH (10% Slurry)	—	6.5 - 7.5
Particle Size	—	As per customer requirement



APPLICATIONS



GLASS INDUSTRY

Used as a major raw material in the production of flat glass, container glass, crystal glass, and fiberglass.



CERAMICS INDUSTRY

Used in ceramic bodies, floor & wall tiles, sanitary ware, and porcelain to improve strength and whiteness.



FOUNDRY INDUSTRY

Used in molding sands and core making for high refractoriness and thermal stability.



PAINTS & COATINGS

Used as an extender, anti-settling agent, and to improve hardness and scratch resistance.



PLASTICS & RUBBER

Improves mechanical strength, abrasion resistance, and dimensional stability.



FILTRATION & WATER TREATMENT

Used in water filters, sand filters, and industrial filtration media.



AVAILABLE FORMS & PARTICLE SIZES

							
LUMP 10 - 50 mm	GRANULAR 2 - 10 mm	10 MESH 2.00 mm	30 MESH 600 μm	100 MESH 150 μm	200 MESH 75 μm	325 MESH 45 μm	400 MESH 38 μm

Other sizes available upon request.



PACKAGING

- 25 kg Bags (palletized)
- 1000 kg Jumbo Bag
- 1300 kg Jumbo Bag





07 SODIC-POTASSIC FELDSPAR



PRODUCT DESCRIPTION

Sodic-Potassic Feldspar is a natural aluminosilicate mineral containing sodium and potassium oxides. It is widely used in ceramics, glass, enamels, pigments, plastics, rubber, and foundry industries due to its fluxing ability, chemical stability, and consistent quality.



CHEMICAL COMPOSITION (XRF ANALYSIS)

COMPONENT	wt%
SiO ₂	64.0 – 68.0
Al ₂ O ₃	17.0 – 20.0
K ₂ O	6.0 – 8.5
Na ₂ O	6.0 – 8.0
CaO	0.2 – 1.5
Fe ₂ O ₃	0.1 – 0.6
MgO	0.1 – 0.3
TiO ₂	0.05 – 0.15
LOI (Loss on Ignition)	0.2 – 0.6

Chemical composition may vary slightly based on origin and grade.



PHYSICAL PROPERTIES

PROPERTY	UNIT	TYPICAL RANGE
Appearance	—	White to pinkish crystalline grains
Specific Gravity	g/cm ³	2.55 – 2.65
Bulk Density	g/cm ³	1.5 – 1.7
Hardness (Mohs)	—	6 – 6.5
Water Absorption	%	≤ 0.3
Melting Point	°C	1100 – 1200
Refractoriness	°C	≥ 1300
Whiteness	%	65 – 80
pH (10% Slurry)	—	6.0 – 7.5
Particle Size	—	As per customer requirement



APPLICATIONS



CERAMIC INDUSTRY

Used as a flux in ceramic bodies, floor & wall tiles, sanitary ware, and porcelain to improve vitrification and strength.



GLASS INDUSTRY

Essential raw material in glass production to reduce melting temperature and improve chemical durability.



PAINTS & COATINGS

Acts as an extender and filler to enhance opacity, brightness, and smoothness.



PLASTICS & RUBBER

Improves mechanical properties, heat stability, and dimensional accuracy.



FOUNDRY INDUSTRY

Used in molds and cores to enhance refractoriness and reduce expansion.



ENAMELS & PIGMENTS

Provides good chemical stability, brightness, and gloss.



AVAILABLE FORMS & PARTICLE SIZES



LUMP
10 – 50 mm



GRANULAR
2 – 10 mm



10 MESH
2.00 mm



30 MESH
600 µm



100 MESH
150 µm



200 MESH
75 µm



325 MESH
45 µm



400 MESH
38 µm

Other sizes available upon request.



PACKAGING

- 25 kg Bags (palletized)
- 1000 kg Jumbo Bag
- 1300 kg Jumbo Bag



CERAMIC INDUSTRY



GLASS INDUSTRY



PAINTS & COATINGS



PLASTICS & RUBBER



FOUNDRY INDUSTRY



ENAMELS & PIGMENTS

08 POTASSIC FELDSPAR



PRODUCT DESCRIPTION

Potassic Feldspar is a natural aluminosilicate mineral containing high potassium oxide (K_2O). It is widely used in ceramics, glass, enamels, paints, plastics, and as a fluxing agent in foundry and metallurgical industries due to its high purity, consistent quality, and excellent performance.



CHEMICAL COMPOSITION (XRF ANALYSIS)

COMPONENT	wt%
SiO_2	63.0 – 66.0
Al_2O_3	18.0 – 20.0
K_2O	11.0 – 13.5
Na_2O	2.0 – 3.5
CaO	0.3 – 1.5
Fe_2O_3	0.1 – 0.4
MgO	0.1 – 0.3
TiO_2	0.05 – 0.15
LOI (Loss on Ignition)	0.3 – 0.8

i Chemical composition may vary slightly based on origin and grade.



PHYSICAL PROPERTIES

PROPERTY	UNIT	TYPICAL RANGE
Appearance	–	Pinkish to white crystalline grains
Specific Gravity	g/cm^3	2.55 – 2.60
Bulk Density	g/cm^3	1.45 – 1.65
Hardness (Mohs)	–	6 – 6.5
Water Absorption	%	≤ 0.3
Melting Point	$^{\circ}C$	1100 – 1200
Refractoriness	$^{\circ}C$	≥ 1300
Whiteness	%	60 – 80
pH (10% Slurry)	–	6.0 – 7.5
Particle Size	–	As per customer requirement



APPLICATIONS



CERAMIC INDUSTRY

Used as a flux in ceramic bodies, glaze, and porcelain to reduce firing temperature and improve strength and vitrification.



GLASS INDUSTRY

Essential raw material in glass manufacturing to enhance transparency, durability, and chemical resistance.



PAINTS & COATINGS

Acts as an extender and functional filler to improve opacity, brightness, and durability.



PLASTICS & RUBBER

Improves mechanical properties, dimensional stability, and heat resistance.



FOUNDRY INDUSTRY

Used as a flux and additive to improve mold quality and casting finish.



ENAMELS & PIGMENTS

Provides good chemical stability, brightness, and gloss.



AVAILABLE FORMS & PARTICLE SIZES



LUMP
10 – 50 mm



GRANULAR
2 – 10 mm



10 MESH
2.00 mm



30 MESH
600 μm



100 MESH
150 μm



100 MESH
75 μm



325 MESH
45 μm



400 MESH
38 μm

i Other sizes available upon request.



PACKAGING

- 25 kg Bags (palletized)
- 1000 kg Jumbo Bag
- 1300 kg Jumbo Bag



CERAMIC INDUSTRY



GLASS INDUSTRY



PAINTS & COATINGS



PLASTICS & RUBBER



FOUNDRY INDUSTRY



ENAMELS & PIGMENTS



09

DOLOMITE



PRODUCT DESCRIPTION

Dolomite is a naturally occurring carbonate mineral composed of calcium magnesium carbonate $[\text{CaMg}(\text{CO}_3)_2]$. It is widely used in steelmaking, glass, ceramics, agriculture, construction, refractory, and environmental applications due to its purity, thermal stability, and consistent chemical composition.



CHEMICAL COMPOSITION (XRF ANALYSIS)

COMPONENT	wt%
CaO	30.0 – 33.0
MgO	20.0 – 22.0
CO ₂	44.0 – 47.0
SiO ₂	1.0 – 2.0
Al ₂ O ₃	0.3 – 0.8
Fe ₂ O ₃	0.2 – 0.5
K ₂ O	0.05 – 0.15
Na ₂ O	0.05 – 0.15
MnO	≤ 0.05
P ₂ O ₅	≤ 0.03
LOI (Loss on Ignition)	46.0 – 48.0

i Chemical composition may vary slightly based on origin and grade.



PHYSICAL PROPERTIES

PROPERTY	UNIT	TYPICAL RANGE
Appearance	—	White to light gray crystalline
Specific Gravity	g/cm ³	2.85 – 2.90
Bulk Density	g/cm ³	1.4 – 1.6
Hardness (Mohs)	—	3.5 – 4.0
Water Absorption	%	≤ 0.5
Melting Point	°C	> 1800
Refractoriness	°C	≥ 1500
pH (10% Slurry)	—	8.5 – 9.5
Whiteness	%	80 – 92
Particle Size	—	As per customer requirement



APPLICATIONS



STEEL INDUSTRY

Used as flux in iron & steelmaking to remove impurities and improve lining performance.



GLASS INDUSTRY

Acts as a stabilizer and flux to enhance chemical durability and reduce melting temperature.



CERAMICS INDUSTRY

Used in ceramic bodies, glazes, and tiles to improve whiteness, hardness, and strength.



AGRICULTURE

Used as soil conditioner and magnesium source to improve crop yield.



CONSTRUCTION INDUSTRY

Used in cement, concrete, asphalt, and road base applications.



ENVIRONMENTAL APPLICATIONS

Used in flue gas desulfurization (FGD) and water treatment.



AVAILABLE FORMS & PARTICLE SIZES

LUMP 10 – 50 mm	GRANULAR 2 – 10 mm	10 MESH 2.00 mm	30 MESH 600 µm	100 MESH 150 µm	200 MESH 75 µm	325 MESH 45 µm	400 MESH 38 µm

i Other sizes available upon request.



PACKAGING

- 25 kg Bags (palletized)
- 1000 kg Jumbo Bag
- 1300 kg Jumbo Bag



STEEL INDUSTRY



GLASS INDUSTRY



CERAMICS INDUSTRY



AGRICULTURE



CONSTRUCTION



ENVIRONMENTAL



10 CALCINED DOLOMITE



PRODUCT DESCRIPTION

Calcined Dolomite is produced through the controlled calcination of high-purity dolomite, resulting in a product rich in calcium oxide (CaO) and magnesium oxide (MgO). It is widely used in steelmaking, refractory production, glass manufacturing, and environmental applications due to its high thermal stability and chemical purity.



CHEMICAL COMPOSITION (TYPICAL ANALYSIS)

COMPONENT	UNIT	TYPICAL VALUE (%)
CaO	%	61.8
MgO	%	34.72
SiO ₂	%	0.21
Al ₂ O ₃	%	0.04
Fe ₂ O ₃	%	0.19
Na ₂ O	%	0.07
K ₂ O	%	0.04
L.O.I (Loss on Ignition)	%	2.93
Sulphur (S)	%	≤ 0.10
Phosphorus (P)	%	≤ 0.02

i Values are typical and may vary slightly depending on origin and grade.



PHYSICAL PROPERTIES

PROPERTY	UNIT	TYPICAL VALUE
Appearance	-	White to light grey solid
Bulk Density	t/m ³	~0.85
True Density	t/m ³	~3.5
pH (aqueous suspension)	-	12 - 13
Melting Point	°C	~2800
Moisture Content	%	≤ 1.5
Fines (< 5 mm)	%	≤ 10



APPLICATIONS



STEEL INDUSTRY

Used as a flux and slag conditioner in BOF, EAF, and ladle refining.



REFRACTORY INDUSTRY

Raw material for basic refractory bricks and lining materials.



GLASS INDUSTRY

Source of CaO and MgO for improving glass durability and workability.



ENVIRONMENTAL APPLICATIONS

Neutralization of acidic wastewater and desulfurization of flue gases.



AGRICULTURE (OPTIONAL)

Soil conditioner and pH regulator (depending on particle size).



METALLURGICAL PROCESSES

Used in various metallurgical and industrial processes.



AVAILABLE FORMS & PARTICLE SIZES



LUMP
10 - 100 mm



GRANULAR
2 - 10 mm



POWDER
< 5 mm

i Other sizes and specifications available upon request.



PACKAGING

- Palletized Bags (in container)
- 1 m³ Jumbo Bags (in container)



STEEL INDUSTRY



REFRACTORY INDUSTRY



GLASS INDUSTRY



ENVIRONMENTAL APPLICATIONS



AGRICULTURE



METALLURGICAL PROCESSES



11 CHROMITE



PRODUCT DESCRIPTION

Chromite ore is supplied as lumpy material with particle sizes ranging from fines up to lumps of approximately 25 cm. Cargo color is grayish to light gray. It is widely used in ferrochrome production, stainless steel manufacturing, refractory materials, foundry applications, and chromium-based chemical industries.



CHEMICAL COMPOSITION

OXIDE	CONTENT (%)
Cr ₂ O ₃	42.28
MgO	21.63
SiO ₂	9.58
Al ₂ O ₃	7.58
Cr/Fe Ratio	2.89
Mg/Al Ratio	3.25
P	< 0.01
S	< 0.05



PHYSICAL PROPERTIES

PROPERTY	VALUE
Appearance	Grayish to Light Gray
Particle Size	Fines to 25 cm Lumps
Moisture Content	0.204 %



APPLICATIONS



FERROCHROME PRODUCTION

Used as the main raw material for ferrochrome alloy production.



STAINLESS STEEL PRODUCTION

Provides chromium for corrosion resistance in stainless steel.



ALLOY STEEL PRODUCTION

Improves hardness, strength and heat resistance in alloy steels.



REFRACTORY BRICKS

Used to produce magnesia-chrome refractory bricks.



FOUNDRY SAND

Applied in casting molds for high-temperature metal casting.



CHROMIUM CHEMICALS

Used to produce chromium compounds such as sodium dichromate, chromic oxide.



GLASS & CERAMICS

Acts as a stabilizer and colorant in glass formulations and ceramic glazes.



LEATHER TANNING

Chromium compounds are used in leather tanning for fiber stabilization.



ELECTROPLATING INDUSTRY

Used to produce chromium plating for corrosion-resistant metal coatings.



PAINTS & PIGMENTS INDUSTRY

Chromium oxide green and other chromite-derived pigments for paints and coatings.



AVAILABLE FORMS



LUMP CHROMITE



CHROMITE FINES



PACKAGING



PALLETIZED BAGS
(in container)



1 m³ JUMBO BAGS
(in container)

WIDELY USED IN KEY INDUSTRIES



FERROCHROME
PRODUCTION



STAINLESS STEEL
PRODUCTION



REFRACTORY
INDUSTRY



FOUNDRY
CASTING



CHROMIUM
CHEMICALS



ELECTROPLATING
INDUSTRY





12 ZEOLITE



PRODUCT DESCRIPTION

Natural Zeolite (Clinoptilolite Grade) is a crystalline hydrated aluminosilicate featuring high cation exchange capacity (CEC ≥ 120 meq/100g), excellent adsorption properties, and molecular sieving performance.

It is widely used in agriculture, environmental treatment, odor control, and industrial applications.

The product is supplied as a light gray to cream powder or granule.



CHEMICAL COMPOSITION

COMPONENT	CONTENT (%)
SiO ₂	68.95
Al ₂ O ₃	11.14
Fe ₂ O ₃	0.97
CaO	4.83
MgO	0.79
Na ₂ O	0.95
K ₂ O	0.95
SO ₃	0.068
LOI (Loss on Ignition)	10.64

Values are typical and may vary slightly depending on origin and grade.



PHYSICAL PROPERTIES

PROPERTY	VALUE
Appearance	Fine Powder, Cream to Light Gray
Moisture (as packed)	$\leq 1.0\%$
Bulk Density	0.85 – 0.95 g/cm ³
pH (in 5% suspension)	7.5 – 9.0
Cation Exchange Capacity (CEC)	≥ 120 meq/100g



APPLICATIONS



AGRICULTURE & SOIL AMENDMENT
Improves soil structure, water retention, and provides ammonium adsorption and pH buffering.



LIVESTOCK & POULTRY
Controls odor, reduces ammonia levels, and improves litter treatment.



ODOR & GAS CONTROL
Effective adsorption of NH₃, VOCs, and other harmful gases.



CONSTRUCTION & OILFIELD
Used as lightweight aggregate, cement additive, and drilling fluid additive.



OILFIELD APPLICATIONS
Enhances drilling fluid performance, controls filtration, and stabilizes wells.



ENVIRONMENTAL TREATMENT
Used in water treatment, heavy metal adsorption, and waste management.



AVAILABLE FORMS



LUMP ZEOLITE



GRANULAR ZEOLITE



POWDER ZEOLITE



PACKAGING

- Palletized Bags (in container)
- 1 m³ Jumbo Bags (in container)



WIDELY USED IN KEY INDUSTRIES



AGRICULTURE & SOIL AMENDMENT



LIVESTOCK & POULTRY



ODOR & GAS CONTROL



CONSTRUCTION MATERIALS



OILFIELD APPLICATIONS



ENVIRONMENTAL TREATMENT



13 PERLITE



PRODUCT DESCRIPTION

Perlite is a naturally occurring volcanic glass containing water, which expands when rapidly heated to around 850–900°C. Expanded perlite is lightweight, chemically inert, non-flammable, and used across various industries for insulation, filtration, and as a lightweight filler.



CHEMICAL COMPOSITION (XRF Analysis)

COMPONENT	wt%
SiO ₂	69.5
Al ₂ O ₃	12.8
Fe ₂ O ₃	0.94
CaO	0.8
MgO	0.5
MnO	0.11
P ₂ O ₅	2.5 – 5.0
SO ₃	0



HEALTH AND SAFETY

- Avoid dust inhalation; use protective masks.
- Store in a dry environment away from moisture.
- Handle gently to avoid particle breakage.



PHYSICAL PROPERTIES

PROPERTY	UNIT	SPECIFICATION
pH	–	7.0 – 7.5
Thermal Conductivity	W/m·K	360
Hardness (Mohs)	–	5.5 – 7
Water Solubility	%	0.0008
Acid Solubility (HCl 1:3)	%	0.015
Bulk Density	kg/m ³	100 – 120

PARTICLE SIZE RANGE (GRADES)

GRADE NAME	SIZE (mm)	DESCRIPTION
Coarse	8 – 4	Expanded coarse grade
Medium	5 – 3	For general-purpose use
Fine	3 – 1	Insulation, horticulture
Powder / Dust	< 1	Filtration, additives



APPLICATIONS



CONSTRUCTION

Lightweight aggregate in plasters, mortars, and insulation panels.



FILTRATION

Liquid filtration media for beverages and chemicals.



AGRICULTURE

Soil conditioner, moisture retention, root aeration.



INDUSTRIAL

Cryogenic insulation, foundry, and refractory materials.



AVAILABLE FORMS



LUMP PERLITE



GRANULAR PERLITE



POWDER PERLITE



PACKAGING

- Palletized Bags (in container)
- 1 m³ Jumbo Bags (in container)



PERLITE RAW & POWDER APPLICATIONS



CONSTRUCTION



FILTRATION



AGRICULTURE



INDUSTRIAL
(CRYOGENIC INSULATION)



FOUNDRY



REFRACTORY
MATERIALS





14 FLUORSPAR



PRODUCT DESCRIPTION

Fluorspar, also known as fluorite (CaF_2), is a naturally occurring mineral composed primarily of calcium fluoride. It is widely used in metallurgy, chemical industry, glass, ceramics, and other industrial applications due to its ability to lower melting points, act as a flux, and improve fluidity during smelting and processing.



APPLICATIONS

- **Metallurgy:** Used as a flux in steelmaking and aluminum production to remove impurities and improve fluidity.
- **Chemical Industry:** Raw material for producing hydrofluoric acid (HF) and fluoride-based chemicals.
- **Glass & Ceramics:** Reduces viscosity in molten glass, improves transparency, and lowers firing temperature.
- **Cement & Refractories:** Acts as a flux to enhance thermal stability and reduce melting temperature.



PACKING

- Palletized bag in container
- 1 m³ jumbo bags in container



HEALTH AND SAFETY

- Chemically stable under normal conditions.
- Avoid inhalation of dust; use masks, gloves, and protective eyewear.
- Store in a cool, dry, and well-ventilated area.
- Keep away from strong acids to prevent HF gas formation.
- Dispose of waste according to local environmental regulations.



AVAILABLE FORMS



LUMP FLUORSPAR
10 – 100 mm



GRANULAR FLUORSPAR
2 – 10 mm



POWDER FLUORSPAR
< 1 mm



FLUORSPAR ANALYSIS

Component	Typical (%)
CaF_2	75–98
CaO	0.5–10
SiO_2	0.2–12
S	0.1–0.2
L.O.I	2 max



PACKAGING

- Palletized Bags (in container)
- 1 m³ Jumbo Bags (in container)



WIDELY USED IN KEY INDUSTRIES



METALLURGY



CHEMICAL INDUSTRY



GLASS INDUSTRY



CERAMICS INDUSTRY



CEMENT INDUSTRY



REFRACTORIES



15 FERROSILICON



PRODUCT DESCRIPTION

Ferro-Silicon is an alloy of iron and silicon, typically containing 15–90% silicon. It is a widely used deoxidizer and alloying element in the steel and foundry industries. The addition of Ferro-Silicon improves the strength, hardness, and corrosion resistance of steels and cast irons. The material is usually supplied in lump or granular form.



APPLICATIONS

- Used as a deoxidizer in steelmaking to remove oxygen and improve quality.
- Serves as an alloying element to enhance strength, wear resistance, and magnetic properties of steels.
- Applied in the production of cast iron to promote graphitization and improve machinability.
- Utilized in the manufacturing of silicon steels for electrical applications.
- Acts as a source of silicon in the production of other ferroalloys.



PACKING

- 1 m³ jumbo bags in container



HEALTH AND SAFETY

Ferro-Silicon dust may cause respiratory irritation if inhaled. Use protective equipment such as gloves, safety glasses, and dust masks during handling. Store in a dry place to avoid contact with moisture, which can generate hydrogen gas. Always follow local safety regulations and MSDS guidelines.



SPECIFICATION: FERROSILICON

Size (mm)	Si%	Al%	C%	P%	S%
10-60	72-75	Max 1.0	Max 0.2	Max 0.04	Max 0.02
10-60	70-72	Max 2.0	Max 0.2	Max 0.04	Max 0.02
10-60	60-65	Max 3.0	Max 0.2	Max 0.10	Max 0.02
3-10	70-72	Max 2.2	Max 0.2	Max 0.05	Max 0.04
3-10	67-70	Max 2.8	Max 0.2	Max 0.05	Max 0.04

FERROSILICON



APPLICATIONS



AVAILABLE FORMS



LUMP FERROSILICON
10 – 60 mm



GRANULAR FERROSILICON
3 – 10 mm



POWDER FERROSILICON
0 – 3 mm



PACKAGING

- 1 m³ Jumbo Bags
in container



USED IN KEY INDUSTRIES



STEEL INDUSTRY



FOUNDRY INDUSTRY



ELECTRICAL STEEL INDUSTRY



ALLOY PRODUCTION



AUTOMOTIVE INDUSTRY



CONSTRUCTION INDUSTRY



16 BARITE

PRODUCT DESCRIPTION

High-purity micronized Barite (Barium Sulfate) derived from natural baryte ore. It is chemically inert, non-toxic, and characterized by high density, brightness, and low oil absorption. Barite is widely used in oil & gas drilling, paints & coatings, plastics, rubber, paper, and medical industries for its unique combination of weight, whiteness, and stability.

APPLICATIONS

- **Oil & Gas:** Used as a weighting agent in drilling fluids to control formation pressure and prevent blowouts.
- **Paint & Coating:** Functions as a filler and pigment extender to enhance gloss, acid resistance, and surface smoothness.
- **Medical:** High-purity grades are used in X-ray contrast media and medical imaging formulations.
- **Chemical & Rubber:** Serves as a barium source and reinforcing filler to improve product durability and chemical resistance.
- **Plastics & Paper:** Used to increase density, opacity, and brightness in plastic compounds and specialty paper coatings.

PACKING

- Palletized bag in container
- 1 m³ jumbo bags in container

HEALTH AND SAFETY

- Barite (BaSO₄) is chemically inert, non-flammable, and non-toxic under normal handling conditions.
- Avoid generating airborne dust; use local ventilation.
- Prolonged inhalation of fine particles may cause mechanical irritation to the respiratory tract.
- Use appropriate personal protective equipment (PPE) – dust mask, gloves, goggles.
- Collect spilled material by sweeping or vacuuming (avoid high-pressure air).
- Dispose of according to local environmental regulations.



CHEMICAL COMPOSITION (XRF ANALYSIS)

Oxide	Content (%)
BaO	61.80
SO ₃	33.44
SiO ₂	2.43
SrO	2.02
CaO	0.43
Fe ₂ O ₃	0.08
MgO (max.)	0.01
TiO ₂	0.01
Al ₂ O ₃	0.001
Equivalent BaSO ₄	≈ 95.8
Loss on Ignition (LOI)	0.37

PHYSICAL PROPERTIES

Property	Unit	Specification
Appearance	—	White, free-flowing powder
Whiteness	%	82 ± 1
Brightness (ISO 2470)	%	71 ± 1
Moisture Content	%	≤ 0.3
pH (10 % slurry)	—	8.1 ± 0.2
Hardness (Mohs)	—	4.5 – 4.6
Specific Gravity	g/cm ³	4.30 – 4.35
Bulk Density	g/cm ³	4.41
Oil Absorption (ASTM D281)	g/100 g	10 – 15
Refractive Index	—	1.64 – 1.65

BARITE RAW & POWDER



APPLICATIONS



AVAILABLE FORMS



LUMP BARITE
10 – 60 mm



GRANULAR BARITE
3 – 10 mm



MICRONIZED POWDER
0 – 3 mm

PACKAGING

- Palletized Bags (in container)
- 1 m³ Jumbo Bags (in container)



USED IN KEY INDUSTRIES





17 BENTONITE FOOD GRADE

PRODUCT DESCRIPTION

Food Grade Bentonite is a purified natural clay mineral mainly composed of Montmorillonite and specially processed to meet food industry requirements. It is widely used for clarification, bleaching, and purification of edible oils by removing pigments, gums, metals, and other impurities.

APPLICATIONS

- **Edible Oil Refining:** Used for clarification, decolorization and purification of vegetable oils.
- Removes impurities, phospholipids, gums, free fatty acids, pigments and metal traces.
- Improves oil color, clarity, stability and shelf life.
- Suitable for sunflower oil, soybean oil, palm oil, canola oil and other edible oils.
- Complies with food grade standards and regulations.

PACKAGING

- Palletized bag in container
- 1 m³ jumbo bags in container

HEALTH AND SAFETY

- Non-toxic and safe for use in food processing applications.
- Avoid inhalation of fine dust; use protective masks.
- Store in a dry, clean area away from moisture and contaminants.
- Keep away from acids and oxidizing agents.
- Complies with relevant food safety regulations.

AVAILABLE FORMS



FOOD GRADE POWDER



MICRONIZED POWDER

PACKAGING

- Palletized Bags (in container)
- 1 m³ Jumbo Bags (in container)



BENEFITS

- ✓ Removes Phospholipids
- ✓ Removes Gums
- ✓ Removes Pigments
- ✓ Removes Free Fatty Acids
- ✓ Removes Metal Traces
- ✓ Improves Shelf Life
- ✓ Improves Clarity & Color

USED IN KEY FOOD & OIL INDUSTRIES



SUNFLOWER OIL



SOYBEAN OIL



PALM OIL



FOOD PROCESSING



OIL REFINERY



QUALITY CONTROL



CHEMICAL COMPOSITION (XRF ANALYSIS)

Component	wt%
SiO ₂	66.03
Al ₂ O ₃	9.95
Fe ₂ O ₃	0.88
MgO	1.95
CaO	2.51
Na ₂ O	0.25
K ₂ O	0.81
P ₂ O ₅	0.05
MnO	0.01
TiO ₂	0.08
MnO	0.01
L.O.I (Loss on Ignition)	16.58

PHYSICAL PROPERTIES

Property	Specification
Appearance	White
Solubility	Insoluble in Water
Moisture	6 – 11 %
pH	3.10 – 3.30
Free Acidity	< 0.03
Particle Size	>64% Passing 200 Mesh
Density	0.45 – 0.55 cc/gr

BENTONITE RAW & POWDER



APPLICATIONS



SUNFLOWER OIL
REFINING



SOYBEAN OIL
PROCESSING



PALM OIL
PURIFICATION



CANOLA OIL
PROCESSING



DECOLORIZATION &
BLEACHING



FOOD INDUSTRY
PROCESSING



18

GYPSUM STONE

CEMENT GRADE



PRODUCT DESCRIPTION

Natural Gypsum Stone (Calcium Sulphate Dihydrate) is a naturally occurring mineral widely used in cement manufacturing and construction materials. It acts as a setting-time regulator in cement production and is supplied in controlled lump sizes for industrial applications.



CHEMICAL COMPOSITION

Component	Specification
Combined Water	≥ 15%
$\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$	≥ 91%
CaO	≥ 32%
SO_3	≥ 43.5%
MgO	≤ 1.3%
NaCl	≤ 0.05%



PHYSICAL PROPERTIES

Property	Value
Specific Gravity	2.30
Bulk Density	1600 kg/m ³
Moisture	0% (at manufacture)
Size Range	0 – 50 mm
Size Range	50 – 250 mm
Size Range	50 – 500 mm



APPLICATIONS

- ✓ Cement Industry
- ✓ Gypsum Board
- ✓ Construction Materials
- ✓ Cement Additive
- ✓ Building Industry



AVAILABLE FORMS



Crushed Gypsum
0 – 50 mm



Lump Gypsum
50 – 250 mm



Lump Gypsum
50 – 500 mm



PACKAGING



Bulk
Cargo



Jumbo
Bags

USED IN KEY INDUSTRIES



CEMENT PLANT



CLINKER PRODUCTION



CONSTRUCTION



GYPSUM BOARD



BUILDING MATERIALS



INFRASTRUCTURE



19

GYPSUM PLASTER 200 MESH



PRODUCT DESCRIPTION

High-purity gypsum plaster produced from selected natural gypsum stone and finely milled to 200 mesh. It is widely used for plastering, decorative finishing, gypsum products, and interior construction applications.



CHEMICAL & PHYSICAL ANALYSIS

Parameter	Result
Whiteness	95
Initial Setting Time	9 min
Final Setting Time	18 min
Water/Stucco Ratio	83%
Compressive Strength (2h)	7.6 N/mm ²
Flexural Strength (2h)	2.7 N/mm ²
Remain on 200 mesh sieve (Brush)	0.07% (<0.4%)
Combined Water (CW)	4.8% (4-7%)
Slump	190 mm (155-210 mm)
pH	7.1 (7-10)
CaSO ₄ ·2H ₂ O	95% (>90%)



APPLICATIONS



Interior Plaster



Decorative Finishing



Gypsum Products



Wall Coating



Construction Industry



AVAILABLE FORMS



200 MESH POWDER



PACKAGING



25 kg
Bags



Jumbo
Bags



BENEFITS

- ✓ High Whiteness
- ✓ Smooth Surface Finish
- ✓ Fast Setting
- ✓ High Strength
- ✓ Consistent Quality
- ✓ Easy Application

USED IN KEY INDUSTRIES



INTERIOR DECORATION



PLASTERING



CONSTRUCTION



GYPSUM BOARD



ARCHITECTURAL DESIGN



BUILDING MATERIALS

