

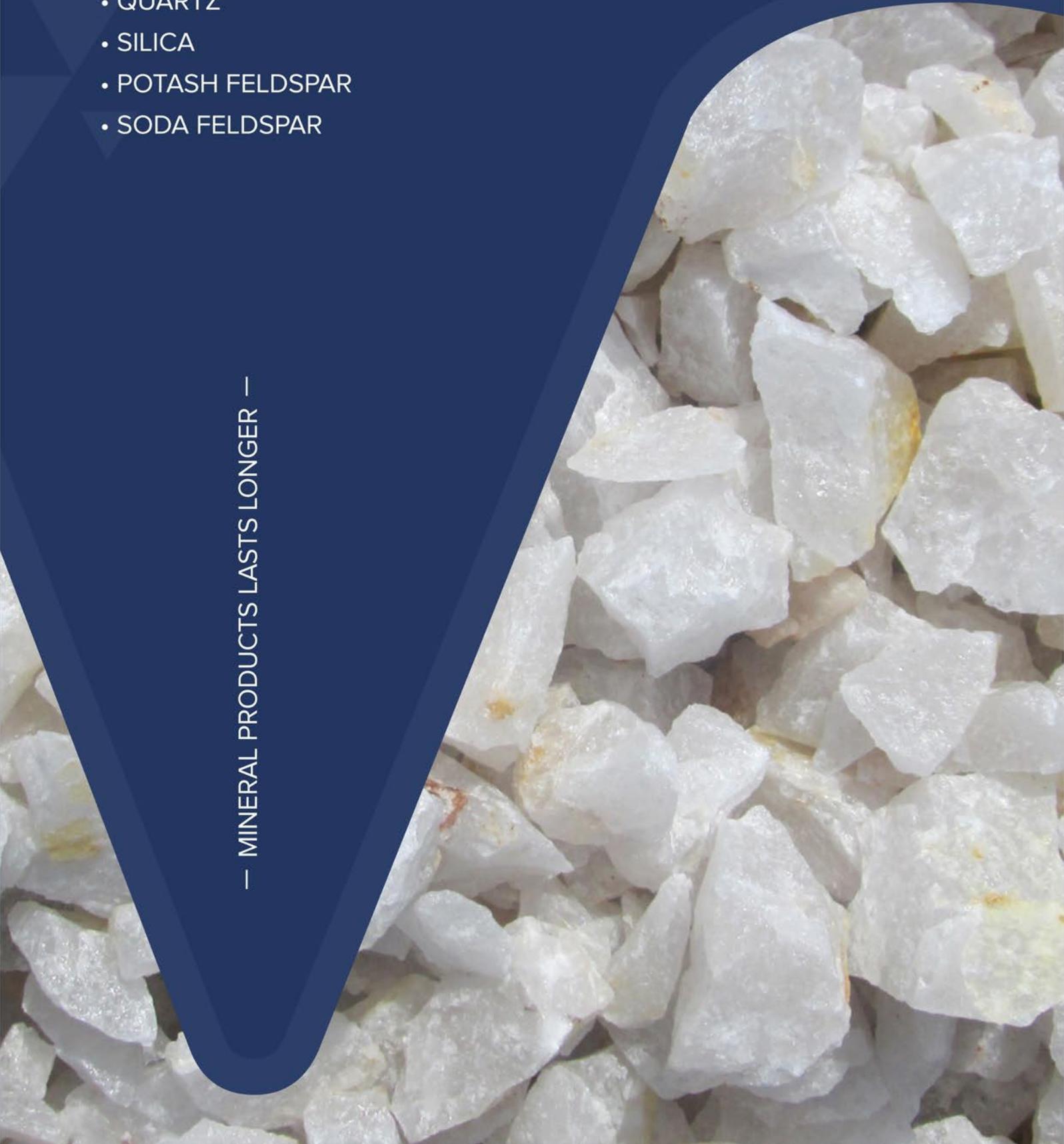
SHIVAM

MULTI
MICRONS
INDIA LLP

leading manufacturer of

- QUARTZ
- SILICA
- POTASH FELDSPAR
- SODA FELDSPAR

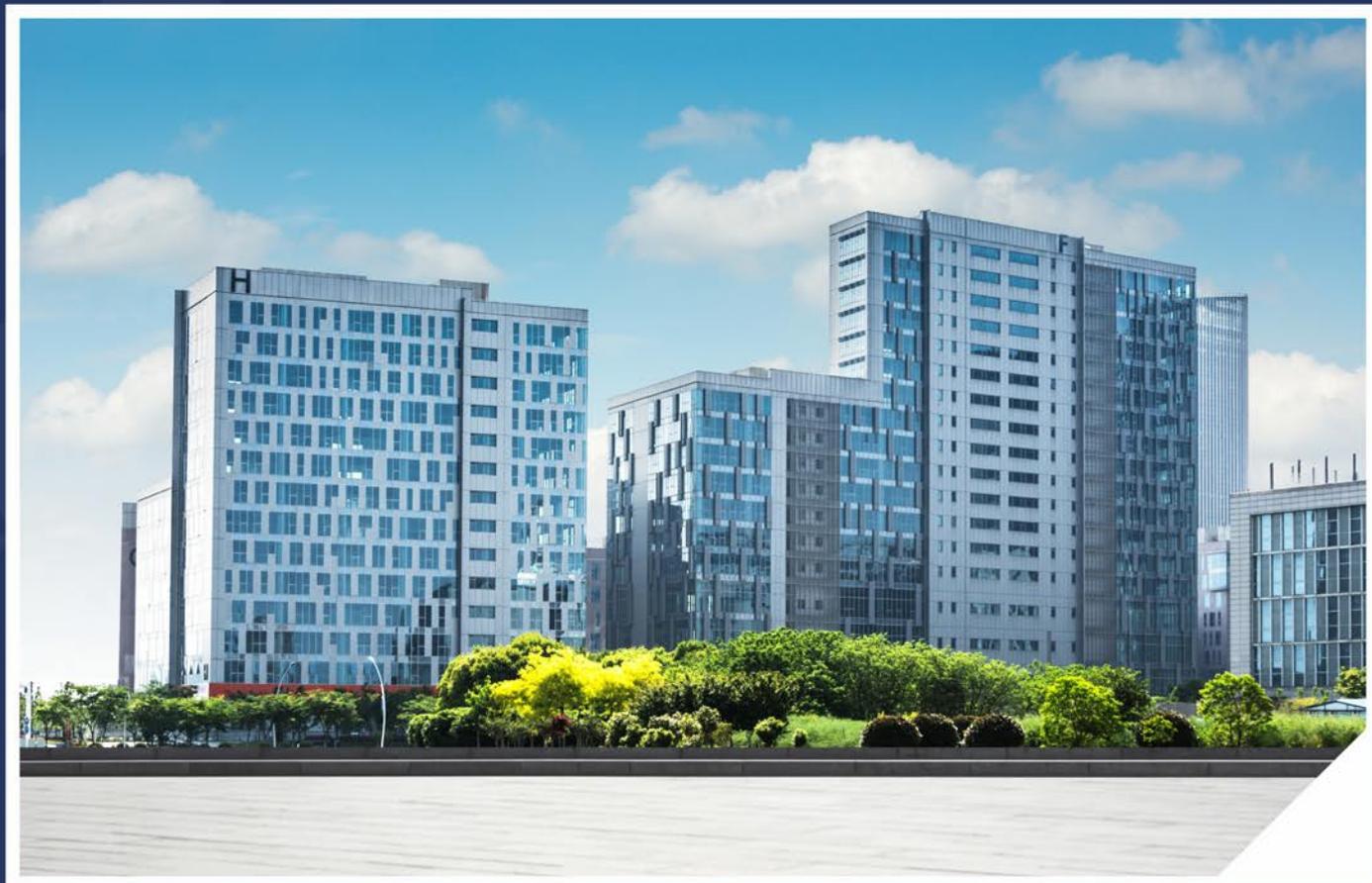
— MINERAL PRODUCTS LASTS LONGER —





LEADING MANUFACTURER OF

- ▶ QUARTZ
- ▶ SILICA
- ▶ POTASH FELDSPAR
- ▶ SODA FELDSPAR



ABOUT US

Shivam Multi Microns incorporated in a short span achieved its status of leading non metallic minerals supplier due to its stringent quality control at all levels. Today the vision of its owner and joint effort of his team has enable the group to capture not only domestic but also international market. Aiming to provide best services - Shivam multi microns has set up its state of art research & development labs & has set up one of the best processing facilities in India.

We are leading manufacturer and exporter of quartz, silica, potash feldspar and soda feldspar using best ingredients. our flexible and reliable serviecs are appreciated by clients all over the world for following reasons:

- Latest Range Of Products
- Competitive Prices
- Customized Solutions
- Timely Delivery

WHY CHOOSE US



RESEARCH & DEVELOPMENT :

Shivam Multi Microns strongly emphasizes on quality control via its research and development. It has the most accurate and reliable scientific instruments required to test the material and maintain its standards.



INNOVATIONS :

Shivam Multi Microns strong Research and development Labs and production unit continuously working on to best product quality. We always believe in continuous improvements & keeping pace with the changing technological developments.



APPLICABILITY :

In the manufacturing of ceramic product, Feldspar is the second most important ingredient after clay. This greatly facilitates the melting of quarts and clays and, through appropriate mixing, allows modulation of this important step of ceramic making.



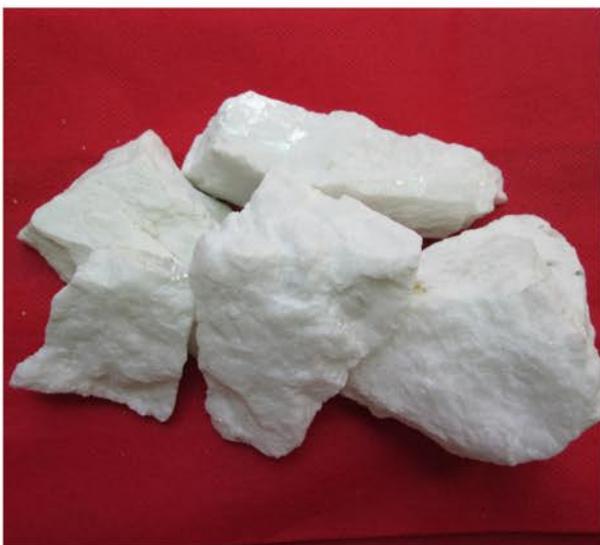
QUALITY :

We are committed to meeting and exceeding your expectations in all that we do. This commitment is enabled and supported by practices and process embedded in all Shivam Multi Microns products, which deliver real value to our clients.

Parameters	Values
Available Packing Sizes	50kg, 1000kgm (Jumbo Bag) and Bulk Loose
Shipment	20ft, 40ft Closed Container Loading via Sea Transportation
Port Of Loading	West Coast of India Ports (Mundra, Kandla, Pipavav, Nava Shiva etc.)

► APPLICATIONS :

Glass, Vitrified Tiles Body, Special Electrical Porcelain insulators, Wind Plates, Sanitary wares, Bone china wares, Pottery, Vitrified Enamels, Glaze and Frits.



**PHOTOS OF
SODA FELDSPAR**

QUARTZ

Quartz a crystal form of Silica is found in massive forming hills, in various forms like Quartz Sand, Sand Stone and Quartzite. The common use of Quartz is in Glass, Ceramics and Refractory. Other uses are to manufacture of Sodium Silicate, Silicone tetrachloride, Ferro Silicon and also to use for water treatment processes.

► TECHNICAL SPECIFICATION :

Properties	Unit	Value
SiO ₂	%	99.95
Fe ₂ O ₃	%	00.01
Al ₂ O ₃	%	00.01
C _a O	%	00.01
TiO ₂	%	Trace
Lol	%	0.17
Refractive index	—	1.544 - 1.553 - Dr + 0.009 (B - G interval)
Specific gravity	—	2.90 constant: variable in impure varieties
Melting point	—	1650 (75) 0C
Streak	—	White/Transparent
Boiling point	—	22300C
Crystal system	—	Trigonal
Solubility	—	H ₂ O insoluble

Available Mesh Size :

100 / 150 / 200 / 250 / 300 / 500, 30 x 80 / 40 x 150 / 24 x 60 / 20 x 80 /
36 x 150 / 2mm / 1mm / 0.5mm

► SIZE FRACTIONS :

Millimetres Scale	ASTM Scale
0.08-0.15mm	100-200 Mesh
0.1-0.2mm	70-120 Mesh
0.2-0.4mm	40-70 Mesh
0.3-0.6mm	26-40 Mesh
0.6-1.2mm	16-26 Mesh
1.2-2.5mm	8-16 Mesh
2.5-4.0mm	6-8 Mesh
4.0-6.0mm	4-6 Mesh
6.0-8.0mm	3-5 Mesh
38 Microns	400 & 200 Mesh

PHOTOS OF QUARTZ :



SILICA

Quartz a crystal form of Silica is found in massive forming hills, in various forms like Quartz Sand, Sand Stone and Quartzite. The common use of Quartz is in Glass, Ceramics and Refractory. Other uses are to manufacture of Sodium Silicate, Silicone tetrachloride, Ferro Silicon and also to use for water treatment processes.

► **GRADE :**

- Silica Sand 16-30 Mesh
- Silica Sand 30-80 Mesh (Glass Grade)
- Silica Sand 50-55 AFS (Foundry Grade)
- Silica Sand 45-50 AFS (Foundry Grade)

► **COLOR :**

Pure White, Cream White, Cream, Pinkish Cream

► **APPLICATIONS:**

Silica has many industrial applications in abrasives and polishes, in glass manufacture, Sodium Silicate, Construction fillers and extenders, silica brick manufacture, as a catalyst, in speciality coatings, cleansers, ceramics, electronics, optics and refractories, in ferro-silicon manufacture, rubber, and as a frac sand.

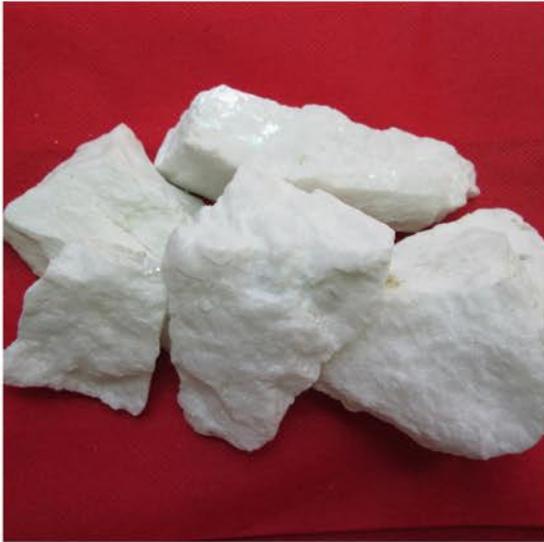
PHOTOS OF SILICA :



► SIZE FRACTIONS :

- Best for Ceramic & Sanitary Ware Manufacturing - Application in both Glaze ($K_2O > 11.5\%$) & Body ($K_2O > 10.5\%$) – gives White Firing Colour.
- Glass Grades – better fluxing from $K_2O > 10\%$ (total alkalis $> 13\%$), Alumina $> 17\%$ for strength, Low Iron Fe_2O_3 at $< 0.5\%$.
- High Potash $K_2O > 11\%$ for Flux coated Welding Electrodes.

PHOTOS OF
POTASH FELDSPAR



POTASH FELDSPAR

The name of "Feldspar" refers to group of Aluminum Silicate of potassium, sodium and calcium. The chief use of Feldspar is in the Ceramic and Glass Industries. Smaller quantities are used in the manufacturing of Tiles, Whiteware, and Sanitaryware. Other uses of Feldspar include Catalysts, Acid resistant and Decorative Stone as a flux or binding agent in certain scanning Soaps and artificial teeth.

		POTASH-01	POTASH-01
Silica	SiO ₂	66% (+/- 1%)	68% (+/- 1%)
Alumina	Al ₂ O ₃	18% (+/- 0.5%)	17% (+/- 0.5%)
Potassium Oxide	K ₂ O	12.8% (+/- 1%)	10% (+/- 1%)
Sodium Oxide	Na ₂ O	2% (+/- 1%)	3% (+/- 1%)
Titanium Oxide	TiO ₂	Nil	Nil
Calcium Oxide	CaO	Nil	Nil
Magnesium Oxide	MgO	Nil	Nil
Ferric Oxide	Fe ₂ O ₃	0.06% (+/- 0.01%)	0.08% (+/- 0.02%)
Loss on Ignition	LOI	0.1%	0.2%

* Above are based on our research as well as research of others. However, this document is not contractual and nothing in it constitutes a warranty (expressed or implied) that the goods described are accurate and fit for a particular purpose of the customer. Purchasers are advised to make their own test to determine the suitability. Potash feldspar is used in various industries.

SODA FELDSPAR

We are accredited for manufacturing quality Soda Feldspar which has diverse application across many industries. Soda Feldspar manufactured from quality raw material procured from our own Mines. We use latest WET GRINDING technology and our products are in compliance with the set standards of the industry. We meet customize demands at very nominal prices.

► SODA FELDSPAR CHEMICAL PROPERTIES

Properties	SO-A	SO-B	SO-EXP
SiO ₂	70% (± 1%)	71% (± 2%)	67% (± 1%)
Al ₂ O ₃	17% (± 1%)	17% (± 2%)	17% (± 1%)
Na ₂ O	8% (± 1%)	7% (± 1%)	10% (± 1%)
K ₂ O	1% (± 0.5%)	1% (± 1%)	1% (± 1%)
liO ₂	Traces	Traces	Traces
CaO	<0.9% (± 0.05%)	<0.9% (± 0.05%)	<0.9% (± 0.05%)
MgO	Traces	Traces	Traces
Fe ₂ O ₃	<0.1% (± 0.05%)	<0.1% (± 0.05%)	<0.1% (± 0.05%)
LOI	0.5%	0.5%	0.5%

► PHYSICAL PROPERTIES OF POTASH FELDSPAR POWDER:

Parameters	Values
L Value	>84
A Value	-0.2 ~ - 0.5
B Value	<5.0
Whiteness	>65Degrass
Particles Size	5% above 200# (74 Microns)
Note: All above parameters are measured after firing at 1210°C temperature in Laboratory Furnace	

CLAY

Ball clay is used in many different industries, but in particular form a vital component in ceramic manufacturing. Kaolin ('china clay') produces a very white color when it is fired, but used alone it is brittle and weak and must be mixed with ball clay to produce a workable, malleable raw material. As a result of their sedimentary origin, raw ball clay have a wide range of colors. However, many of them are valued by the ceramics industry for their white-firing properties, which are determined by the levels of iron and other coloring/fluxing oxides within the clay.

Properties	SMMB	SSB-O2
SiO ₂	61.2%	49.8%
Al ₂ O ₃	26.5%	32.3%
Na ₂ O	0.6%	0.52%
K ₂ O	1.2%	0.82%
TiO ₂	0.52%	0.55%
CaO	0.42%	1.45%
MgO	0.25%	0.25%
Fe ₂ O ₃	0.7%	0.8%
LOI	7.8%	12.1%

PHOTOS OF CLAY:



TALC

Talc is a naturally occurring mineral whose chemical name is hydrated magnesium silicate ($H_2Mg_3-SiO_3)_4$). It is formed by metamorphosis of sedimentary rocks namely

Properties	TALC
SiO_2	54.8%
Al_2O_3	1.8%
Na_2O	0.2%
K_2O	0.06%
TiO_2	0.43%
CaO	1.25%
MgO	31%
Fe_2O_3	3.9%
LOI	5.4%

PHOTO OF TALC:



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