THE MINERAL SOLUTION COMPANY

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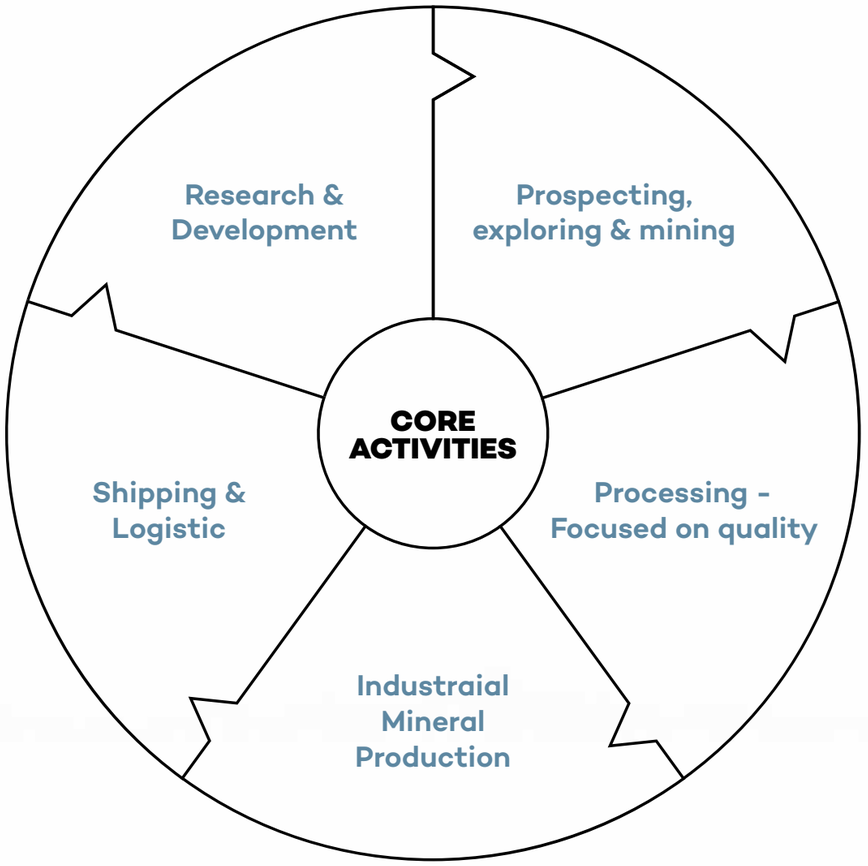
Ceramin believes in creating enduring partnerships with its clients and adding value by sharing information, identifying potential cost effective raw material solutions and creating regional resources to meet global & local demands.

About Us

- Founded in 2006
- Head Office : RAK, UAE
- Ceramin was formed from the growing need for total mineral solutions
- A regional leader in the supply of minerals



Prospecting, exploring & mining

Ceramin has in-depth knowledge of the specific properties of each mineral in the various grades and applications that provide most value. The refining and conversion process used to purify minerals and adapt them to precise industrial applications are adjusted for optimal functioning with a given reserve grade.

Ceramin believes in creating and developing high quality, regional resources close to you that deliver significant advantage by prospecting, mining and processing minerals.

Processing

Ceramin owns sodium and potassium feldspar processing plants in India. Ceramin processes high quality art grinding plant of Zirconium Silicate (Opacifier Grade) in January 2009 at Ras Al Khaimah UAE to meet regional demand. The brand ‘ZIRCOMIN’ is well established in Middle East ceramic industry.

A committed and experienced team works tirelessly to achieve the highest quality standards in the end products. Each consignment of minerals and composites goes through several quality check stages before it’s delivered to your doorstep.

Ceramin Owns Crushing and grinding plants in different location to process Feldspar for use in Ceramic, sanitary-ware and glass Industry.

Shipping & Logistic

Our shipping division has extensive experience in solving problems involved in mining logistics. In some cases, our division's fleet network and logistic capabilities have significantly increased the supply of small regional mining operations, opening up viable mineral resources to local producers and creating jobs in local communities. For you, it means a commitment of uninterrupted supply, guaranteed quality and a promise of delivery on time, every time.

Our edge lies in providing a seamless end-to-end solution, including managing the complete shipping and logistics requirement. We have dedicated team which works after load and sea transportation. Our forte lies in chartering bulk vessels at the most competitive sea-frights.

Research & Development

Research and development is one of the core functions at Ceramin. We have one of the largest state-of-the-art R&D facilities in the industry, at Ras Al Khaimah, UAE. Our R&D experts are continually evolving new compositions that deliver real cost advantages to our clients.

We are constantly striving to economies the overall ceramic body by reducing the material costs while improving the strength and character of the end product. We test the complete workability of our mineral compositions before we recommend them. This means you get to see and test the manufactured product before any commitment is made.

Customized Raw Material solutions

Ceramin is far more than simply a company that supplies raw materials to the ceramic industry. We understand that each client has unique objectives, distinct needs and specific manufacturing processes that are instrumental to their businesses.

Hence at Ceramin:

- Instead of simply offering a lower priced mineral, we believe in adding value at every stage of the chain and providing a complete cost effective mineral solution.
- We believe in partnering you, understanding your technical requirements and then suggesting the solution that uses minerals sourced regionally.
- We ensure that the composition is cost-effective and compatible to your industrial application.
- We strongly believe in building trust and enduring relationships.
- Solutions that conform to your manufacturing processes and quality benchmarks
- Holistic raw material supply solution
- Technically knowledgeable team
- Focus on partnerships with our clients

Products

BALL CLAY
NON PLASTIC CLAY
BENTONITE
KAOLIN
SODIUM FELDSPAR
POTASSIUM FELDSPAR
WASHED FELDSPAR
ZIRCONIUM SILICATE
QUARTZ

FOLLOWING
PARAMETER REVEALS
THE SPECIFICATION
OR TECHNICAL
DATA SHEET OF THE
INDIVIDUAL MATERIALS

Ball Clay

DESCRIPTION AND CHARACTERISTIC

Ball Clay is fine grained, sedimentary clay that usually white, grey and dark brown in color and it is a blend predominated by minerals such as Illite, Kaolinite, Hydro mica and Quartz. Our Ball clay have various grades like Plastic Ball clay, Semi plastic Ball clay and Non plastic clay.

APPLICATION

Due to its trademarks properties like plasticity, binding, green strength, Rheological stability and white firing is being used for Ceramics, Sanitary ware, Tableware, Wall & Floor tiles, Refractory, Electrical insulator etc.

PRODUCT CODE	PLASTIC BALL CLAY (EIB 01)	SEMIPLASTIC BALL CLAY (EIB 02)	SEMIPLASTIC BALL CLAY (MBC 05)	PLASTIC BALL CLAY (MBC 10)
PHYSICAL PARAMETERS				
Form	Lumps	Lumps	Lumps	Lumps
Raw Color	Cream White	Cream White	Greyish White	Light Brown
Firing Temperature	1190°C to 1230°C	1190°C to 1230°C	1190°C to 1230°C	1190°C to 1230°C
Cycle Time	37" to 60"	37" to 60"	37" to 60"	37" to 60"
Green M.O.R(kg/cm2)	> 10.00	> 8.00	> 7.00	> 7.00
Dry M.O.R(kg/cm2)	> 25.00	> 12.00	> 12.00	> 15.00
Fired M.O.R(kg/cm2)	> 250.00	> 200.00	> 125.00	> 200.00
Fired Shrinkage (%)	< 8.00	< 7.50	< 9.00	< 10.00
Water Absorption (%)	< 6.00	< 9.00	< 12.00	< 7.00
FIRED COLOR VALUES				
L* Value	> 75.00	> 76.00	> 82.00	> 69.00
a* Value	< 2.00	< 2.75	< 3.50	< 3.00
b* Value	< 15.00	< 19.00	< 12.00	< 23.00
CHEMICAL PARAMETERS				
Silica as SiO2 (%)	< 60.00	< 61.00	< 59.00	< 78.00
Alumina as Al2O3 (%)	> 25.00	> 25.00	> 32.00	> 14.00
Iron as Fe2O3 (%)	< 1.30	< 1.20	< 1.30	< 2.00
Titanium as TiO2 (%)	< 1.40	< 1.80	< 1.40	< 2.50
Calcium as CaO (%)	< 6.00	< 0.75	< 1.00	< 2.00
Magnesium as MgO (%)	< 0.75	< 0.50	< 0.75	< 1.00
Sodium as Na2O (%)	< 0.50	< 0.50	< 0.50	< 1.00
Potassium as K2O (%)	< 1.50	< 1.40	< 2.00	< 2.50
Loss on Ignition (%)	< 14.50	< 10.00	< 13.50	< 11.00

PACKAGING	ORIGIN
BULK	INDIA & MALAYSIA

Non Plastic Clay

DESCRIPTION AND CHARACTERISTIC

Non Plastic Clay is sedimentary clay that usually white in color and it is a blend predominated by minerals such as Kaolinite, Quartz and Free Silica.

APPLICATION

Due to its free silica and quartz content improves the brightness and L * values of vitrified product. Due to its white firing is being used for homogenous and glazed porcelain tile industries.

PRODUCT CODE	CNP 01

PHYSICAL PARAMETERS

Form	Lumps
Raw Color	Dull White
Firing Temperature	1190°C to 1230°C
Cycle Time	37" to 60"
Fired M.O.R(kg/cm2)	Min 50 Kg/cm2
Fired Shrinkage (%)	< 4.00
Water Absorption (%)	< 21.00

FIRED COLOR VALUES

L* Value	> 91.00
a* Value	< 1.50
b* Value	< 10.00

CHEMICAL PARAMETERS

Silica as SiO2 (%)	< 84.00
Alumina as Al2O3 (%)	> 15.00
Iron as Fe2O3 (%)	< 1.25
Titanium as TiO2 (%)	< 1.25
Calcium as CaO (%)	< 0.75
Magnesium as MgO (%)	< 0.75
Sodium as Na2O (%)	< 0.50
Potassium as K2O (%)	<1.50
Loss on Ignition (%)	< 10.00

PACKAGING	ORIGIN
BULK	MALAYSIA

Bentonite

DESCRIPTION AND CHARACTERISTIC

Bentonite is a type of clay that is primarily composed of the mineral montmorillonite, along with other minerals such as feldspar, calcite, and quartz. It is usually light gray or beige in color.

APPLICATION

Bentonite enhances the plasticity and improve the strength and workability of ceramic product. It help to suspend glaze ingredients. Due to its highly absorbent clay that has many uses in various industries, including cosmetics, pharmaceuticals, and construction. Bentonite is use as a drilling fluid in the oil and gas industry.

PRODUCT CODE	BEN - IRN

PHYSICAL PARAMETERS

Form	Lumps
Raw Color	Dark Brown
Firing Temperature	1120°C
Cycle Time	37"
Green M.O.R(kg/cm2)	-
Dry M.O.R(kg/cm2)	> 15.00
Fired M.O.R(kg/cm2)	> 125.00
Fired Shrinkage (%)	< 6.00
Water Absorption (%)	< 16.00

FIRED COLOR VALUES

L* Value	> 65.00
a* Value	< 8.00
b* Value	< 22.00

CHEMICAL PARAMETERS

Silica as SiO2 (%)	< 68.00
Alumina as Al2O3 (%)	> 10.50
Iron as Fe2O3 (%)	< 2.50
Titanium as TiO2 (%)	< 0.75
Calcium as CaO (%)	< 5.50
Magnesium as MgO (%)	< 4.20
Sodium as Na2O (%)	< 2.00
Potassium as K2O (%)	< 1.00
Loss on Ignition (%)	< 11.00

PACKAGING	ORIGIN
BULK	UAE

Kaolin

1. RAW KAOLIN

DESCRIPTION AND CHARACTERISTIC

Kaolin is a soft, white naturally occurring clay consist of minerals such as Kaolinite, Hydro mica, Muscovite and Anatase. Our products in the form of Raw Kaolin and Processed Kaolin.

APPLICATION

Raw Kaolin whiteness and strength are high so, it's being used for body preparation of tiles & englobe in Ceramics, Sanitary ware, Tableware. Processed Kaolin trademarks high whiteness, high alumina, adsorbency, chemical inertness and non-swelling capabilities, hence being used for Paints, Rubber, Paper, Pharmaceuticals and Agriculture.

PRODUCT CODE	AM1S	BM1S	DK 01	CDG 01
PHYSICAL PARAMETERS				
Form	Chips(0 -5 mm)	Chips(0 -5 mm)	Chips(0 -5 mm)	Chips(0 -5 mm)
Raw Color	White	White	White	White
Firing Temperature	1190°C to 1230°C	1190°C to 1230°C	1190°C to 1230°C	1190°C to 1230°C
Cycle Time	37" to 60"	37" to 60"	37" to 60"	37" to 60"
Dry M.O.R(kg/cm2)	> 15.00	> 15.00	-	-
Fired M.O.R(kg/cm2)	> 150.00	> 180.00	> 20.00	> 80.00
Fired Shrinkage (%)	< 3.00	< 3.00	< 2.00	< 3.00
Water Absorption (%)	< 17.00	< 16.00	< 24.00	< 18.00
FIRED COLOR VALUES				
L* Value	> 92.00	> 90.00	> 92.50	> 91.00
a* Value	< 1.20	< 1.40	< 1.70	< 2.50
b* Value	< 6.50	< 7.00	< 6.00	< 7.50
CHEMICAL PARAMETERS				
Silica as SiO2 (%)	< 82.00	< 85.00	< 81.00	< 83.00
Alumina as Al2O3 (%)	> 11.00	> 9.50	> 11.50	> 10.00
Iron as Fe2O3 (%)	< 0.20	< 0.25	< 0.30	< 0.35
Calcium as CaO (%)	< 1.00	< 1.25	< 1.00	< 1.25
Magnesium as MgO (%)	< 0.25	< 0.25	< 0.50	< 0.40
Sodium as Na2O (%)	< 0.25	< 0.50	< 0.50	< 0.50
Potassium as K2O (%)	< 0.50	< 0.50	< 0.50	< 0.50
Titanium as TiO2 (%)	< 0.30	< 0.30	< 0.30	< 0.35
Loss on Ignition (%)	< 6.00	< 6.00	< 7.50	< 7.00

PACKAGING	ORIGIN
BULK	UAE

2.PROCESSED KAOLIN

PRODUCT CODE	CG1A	CG1B
PHYSICAL PARAMETERS		
Form	Lumps	Lumps
Raw Color	Cream White	Cream White
Firing Temperature	1190°C to 1230°C	1190°C to 1230°C
Cycle Time	37" to 60"	37" to 60"
Fired Shrinkage (%)	< 6.00	< 6.50
Water Absorption (%)	< 18.00	< 20.00
FIRED COLOR VALUES		
L* Value	> 92.00	> 94.00
a* Value	< 1.50	< 2.00
b* Value	< 6.00	< 5.75
CHEMICAL PARAMETERS		
Silica as SiO2 (%)	< 48.00	< 51.00
Alumina as Al2O3 (%)	> 34.00	> 34.00
Iron as Fe2O3 (%)	< 1.00	< 0.75
Titanium as TiO2 (%)	< 1.50	< 0.75
Calcium as CaO (%)	< 1.00	< 0.60
Magnesium as MgO (%)	< 0.75	< 0.70
Sodium as Na2O (%)	< 0.75	< 0.50
Potassium as K2O (%)	< 1.00	< 0.75
Loss on Ignition (%)	< 14.00	< 13.50

PACKAGING	ORIGIN
1/1.25 MT Jumbo bags & 50 Kgs HDPE bags	INDIA & MALAYSIA

Sodium Feldspar

DESCRIPTION AND CHARACTERISTIC

Sodium feldspar is a blend predominated by minerals such as Albite and Anorthite. It is mostly white, light grey in color. Our product is characterized by high fusibility and low impurities such as Iron, Titania and free Quartz in the matrix. Our product is in the form of Powder and Chips.

APPLICATION

Due to its alkali and alumina content acts as a vitrifying or fluxing agents and lowering the melting temperature and form a glossy phase. This Product widely being used in various application such as in fritz, glazes, engobe, white porcelain bodies in Ceramics, Premium Table ware bodies, Sanitary ware, Glass, Paints, Rubber industries etc.

PRODUCT CODE	Soda Feldspar (BS 01)	Sodic Potash (PSF 01)	Soda Feldspar (TS 03)	Soda Feldspar (SF 01(P))
PHYSICAL PARAMETERS				
Form	Chips(0 -5 mm)	Chips(0 -5 mm)	Chips(0 -5 mm)	Powder(200#)
Raw Color	Greyish White	Yellowish Brown	Pale Yellowish	White
Firing Temperature	1190°C to 1230°C	1190°C to 1230°C	1190°C to 1230°C	1180°C +/-
Cycle Time	37" to 60"	37" to 60"	37" to 60"	38" to 52"
FIRED COLOR VALUES				
L* Value	> 60.00	> 67.00	> 69.00	> 78.00
a* Value	< 2.25	< 3.90	< 2.00	< 2.00
b* Value	< 8.00	< 14.00	< 14.00	< 7.00
CHEMICAL PARAMETERS				
Silica as SiO2 (%)	< 81.00	< 78.00	< 79.00	< 70.00
Alumina as Al2O3 (%)	> 11.00	> 13.00	> 11.00	> 16.50
Iron as Fe2O3 (%)	< 0.52	< 0.60	< 0.35	< 0.08
Calcium as CaO (%)	< 0.65	< 1.00	< 2.00	< 1.00
Magnesium as MgO (%)	< 0.50	< 0.50	< 0.75	< 0.75
Sodium as Na2O (%)	> 6.00	> 5.00	> 5.50	> 10.00
Potassium as K2O (%)	> 0.20	> 3.00	> 0.20	> 2.00
Titanium as TiO2 (%)	< 0.20	< 0.50	< 0.35	< 0.02
Loss on Ignition (%)	< 1.50	< 1.50	< 1.00	< 1.00

PACKAGING	ORIGIN
BULK , 1/1.25 Mt JUMBO BAGS & 50 KGS HDPP BAGS	UAE, INDIA, THAILAND & MALAYSIA

Potassium Feldspar

DESCRIPTION AND CHARACTERISTIC

Potassium feldspar is an alkali-alumino-silicate predominated by feldspathic minerals such as Orthoclase, Microcline and Sanidine. It is mostly pink, light pink, white and pinkish-brown in color. Our product is characterized by high alkali and low impurities such as Iron, Titania and free Quartz in the matrix. Our product is in the form of Powder and Chips.

APPLICATION

Due to its high alkali and alumina content acts as a vitrifying or flux agents and lowering the melting temperature and form a glossy phase. This Product widely being used in various application such as in Enamel fritz, Translucent glazes, Vitreous porcelain bodies in Ceramics, Table ware, Sanitary ware, Glass, Paints, Rubber industries etc.

PRODUCT CODE	Potash feldspar (KG 03)	Potash Feldspar (5 KFCG)	Potash Feldspar (5 KFSPG)	Potash Feldspar (2KF 101 70)
PHYSICAL PARAMETERS				
Form	Chips(0 -5 mm)	Chips(0 -5 mm)	Chips(0 -5 mm)	Powder(200#)
Raw Color	Pink	Pink	Pink	Pinkish White
Firing Temperature	1190°C to 1230°C	1215 °C +/ -	1215 °C +/ -	1215 °C +/ -
Cycle Time	37" to 60"	40" +/ -(Soaking)	40" +/ -(Soaking)	40" +/ -(Soaking)
FIRED COLOR VALUES				
L* Value	> 55.00	> 69.00	> 73.00	> 70.00
a* Value	< 8.00	< 4.00	< 4.00	< 4.00
b* Value	< 10.00	< 6.00	< 6.00	< 4.00
CHEMICAL PARAMETERS				
Silica as SiO2 (%)	< 82.00	< 72.00	< 70.00	< 70.00
Alumina as Al2O3 (%)	> 10.00	> 17.00	> 17.00	> 16.50
Iron as Fe2O3 (%)	< 1.15	< 0.25	< 0.20	< 0.10
Calcium as CaO (%)	< 0.50	< 0.50	< 0.50	< 0.75
Sodium as Na2O (%)	> 0.50	> 2.80	> 2.50	> 2.00
Potassium as K2O (%)	> 5.00	> 8.00	> 8.50	> 10.00
Titanium as TiO2 (%)	< 0.35	< 0.05	< 0.05	< 0.05
Loss on Ignition (%)	< 2.75	< 1.00	< 1.00	< 1.00

PACKAGING	ORIGIN
BULK , 1/1.25 Mt JUMBO BAGS & 50 KGS HDPP BAGS	UAE & INDIA

Washed Feldspar

DESCRIPTION AND CHARACTERISTIC

It's same like Sodium, Potassium and mixed feldspar is a blend predominated by minerals such as Albite Anorthite, Orthoclase, Microcline and Sanidine. These feldspar are mined and processed in India as per standard requirements of Ceramic industries. Our product is characterized by high fusibility and low impurities such as Iron, Titania and free Quartz in the matrix. Our product is in the form of Powder.

APPLICATION

Due to its alkali and alumina content acts as a vitrifying or fluxing agents and lowering the melting temperature and form a glossy phase. This Product widely being used in various application such as in fritz, glazes, engobe, white porcelain bodies in Ceramics, Premium Table ware bodies, Sanitary ware, Glass, Paints, Rubber industries etc.

PRODUCT CODE	Washed Soda Feldspar (2SF WP 108 78)	Washed Potash Feldspar (2KF WP 118 70)	Washed Mixed Feldspar (2KSF WP 109 75)
PHYSICAL PARAMETERS			
Form	Powder(#200)	Powder(#200)	Powder(#200)
Raw Color	White	White	White
Firing Temperature	1215 °C +/ -	1215 °C +/ -	1215 °C +/ -
Cycle Time	40" +/ -(Soaking)	40" +/ -(Soaking)	40" +/ -(Soaking)
Moisture %	< 17.00	< 17.00	< 17.00
FIRED COLOR VALUES			
L* Value	> 85.00	> 79.00	> 83.00
a* Value	< 2.00	< 2.00	< 2.00
b* Value	< 5.00	< 5.00	< 6.00
CHEMICAL PARAMETERS			
Silica as SiO2 (%)	< 75.00	< 72.00	< 74.00
Alumina as Al2O3 (%)	> 15.00	> 16.50	> 16.00
Iron as Fe2O3 (%)	< 0.08	< 0.09	< 0.09
Calcium as CaO (%)	< 2.00	< 1.00	< 1.00
Sodium as Na2O (%)	> 6.80	> 2.50	> 4.50
Potassium as K2O (%)	> 2.00	> 9.50	> 4.85
Titanium as TiO2 (%)	< 0.02	< 0.02	< 0.02
Loss on Ignition (%)	< 0.30	< 0.30	< 0.30
Loss on Ignition (%)	< 1.50	< 1.50	< 1.00

PACKAGING	ORIGIN
BULK & 1.25/1.4 Mt JUMBO BAGS	INDIA

Zirconium Silicate

DESCRIPTION AND CHARACTERISTIC

Zirconium silicate is a white, odorless powder that is insoluble in water. It is composed of Zirconium, Silicon and Oxygen.

APPLICATION

Zirconium silicate is widely used in the ceramics industry. It is a key ingredient in the production of Ceramic glazes, Opacifiers, and Pigments. Due to its hardness, abrasion resistance, and chemical stability, its applications span various industries including Refractories, Dental materials and Abrasives.

1. ZIRCOMIN

CHEMICAL PARAMETERS	RANGE
Zirconium as ZrO2 + Hafnium as HfO2:	Min. 60.0 %
Silica as SiO2 (%)	Max. 39.0 %
Alumina as Al2O3 (%)	Max. 2.25 %
Iron Oxide as Fe2O3:	Max. 0.15 %
Titanium Oxide as TiO2:	Max. 0.50 %
Loss on Ignition @ 1000°C:	Max. 2.00 %
GRANULOMETRY	
Particle Size D(50)= 1.8 +/- 0.2 Micron	
ORIGIN	
Australian origin sand processed in UAE	
PACKING	
JUMBO BAGS/ 25 KGS/ 40 KGS HDPP BAGS	

2. ZIRCOFLOUR

CHEMICAL PARAMETERS	RANGE
Zirconium as ZrO2 + Hafnium as HfO2:	Min. 60.0 %
Silica as SiO2 (%)	Max. 39.0 %
Alumina as Al2O3 (%)	Max. 2.25 %
Iron Oxide as Fe2O3:	Max. 0.15 %
Titanium Oxide as TiO2:	Max. 0.50 %
Loss on Ignition @ 1000°C:	Max. 2.00 %

GRANULOMETRY
Particle Size - 45 Micron

ORIGIN
Australian origin sand processed in UAE

PACKING
JUMBO BAGS/ 25 KGS/ 40 KGS HDPP BAGS

Quartz

DESCRIPTION AND CHARACTERISTIC

Quartz is a mineral composed of Silicon and Oxygen. It is abundant in igneous, metamorphic and sedimentary rocks. For our product we select only the high grade transparent lumps for processing.

APPLICATION

This product is rich in whiteness and purity, hence it is being used in super white bodies, engobe and glazes. Due to its hardness and inertness, it's being used in Paints, Cosmetics and Rubber industries.

PRODUCT CODE	Quartz(325#)
PHYSICAL PARAMETERS	
Form	Powder(325#)
Raw Color	White
Firing Temperature	1190°C to 1230°C
Cycle Time	37" to 60"
FIRED COLOR VALUES	
L* Value	> 96.00
a* Value	< 2.00
b* Value	< 2.75
CHEMICAL PARAMETERS	
Silica as SiO2 (%)	< 99.00
Alumina as Al2O3 (%)	> 0.70
Iron as Fe2O3 (%)	< 0.07
Calcium as CaO (%)	< 0.10
Magnesium as MgO (%)	< 0.10
Sodium as Na2O (%)	< 0.10
Potassium as K2O (%)	< 0.10
Titanium as TiO2 (%)	< 0.05
Loss on Ignition (%)	< 0.35

PACKAGING	ORIGIN
1/1.25 Mt JUMBO BAGS & 50 KGS HDPP BAGS	INDIA

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