



**MINECHEM**  
Mineral Solutions

# **BODY GRADE MATERIAL**





# About Us

Welcome to **MineChem Mineral Solutions**, a leading provider of high-quality raw materials and blended clay for various industries. We take pride in offering top-notch solutions that cater to the diverse needs of tile, sanitaryware, ceramics, and related applications. At MineChem, we understand the importance of superior materials in the manufacturing process. With our extensive experience and expertise in the field, we have established ourselves as a trusted supplier of premium mineral solutions. Our commitment to excellence and customer satisfaction sets us apart from the competition. Our company is driven by a passionate team of industry professionals who are dedicated to delivering the finest quality products.

We source our raw materials from reputable mines and employ rigorous quality control measures to ensure consistent excellence in every batch.

Our state-of-the-art production facilities are equipped with advanced technology, enabling us to maintain the highest standards throughout the manufacturing process. We specialize in providing a wide range of raw materials and blended clay that are specifically tailored to meet the unique requirements of tile, sanitaryware, ceramics, and related industries. Our products are carefully formulated to offer exceptional performance, durability, and aesthetic appeal. We understand that every project is unique, and our team works closely with clients to develop customized solutions that meet their precise specifications. Customer satisfaction is at the core of our business philosophy.



We believe in building long-term relationships with our clients, based on trust, reliability, and superior quality. Our knowledgeable and responsive sales team is always ready to assist our customers, offering technical support, guidance, and efficient logistics solutions.

Beyond our commitment to quality and customer service, we are also deeply committed to sustainability and environmental responsibility. We strive to minimize our ecological footprint through responsible sourcing practices, efficient manufacturing processes, and waste reduction initiatives. We are dedicated to preserving our planet for future generations. Partner with MineChem Mineral Solutions for all your raw material and blended clay needs. Experience the difference of working with a company that values integrity, quality, and innovation. We are proud to be your trusted partner in creating exceptional tile, sanitaryware, ceramics, and other products that elevate your business to new heights. Contact us today to discuss your requirements and let us provide you with the finest mineral solutions that exceed your expectations.

# R & D Department

Minechem Ceramic Technology Center is well equipped and centrally air-cooled with the latest modern equipment. All tests and calibrations carried out by the MCTC are assured of their correctness with full justification of the sample.

Minechem Ceramic Technology Center offers full cooperation to the clients and their representative in relation to the work performed. Keeping customer satisfaction in focus, At the same time, ensures the complete confidentiality of clients.





We understand that the right minerals are vital for the production of high-quality tiles and sanitaryware.

Our Minechem division specializes in providing premium mineral solutions to enhance your raw material composition. Our product range including:

**Ball Clay :**

A versatile clay known for its plasticity and binding properties, adding strength and flexibility to your products.

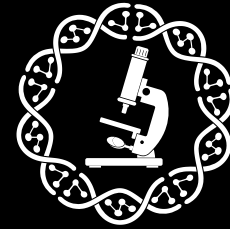
**Potash Feldspar :**

A key ingredient in glazes, contributing to the durability, stability, and aesthetics of tiles and sanitaryware.

**China Clay (Kaolin) :**

An essential component for body formulation, ensuring excellent whiteness strength, and shrinkage control.

And more Explore our extensive range of minerals tailored to meet your specific requirements.



**MINECHEM CERAMIC  
TECHNOLOGY CENTER**

WHERE INNOVATION LEADS

MCTC takes pride in its state-of-the-art testing facilities, ensuring that your tiles and sanitaryware meet the highest quality standards.

Our advanced laboratory is equipped with modern equipment and skilled technicians to conduct various tests, including:

**MOR Testing :**

Assessing the strength and durability of fired tiles and sanitaryware to withstand different loads and impacts.

**Fired Color Test :**

Evaluating the color stability and consistency of tiles and sanitaryware after firing, ensuring vibrant and consistent hues.

**Plasticity Test :**

Analyzing the plasticity and workability of clay bodies used in the manufacturing process for optimal shaping and forming.

**Chemical Analysis - XRF  
Vitrification Properties  
Selected Elemental Analysis  
Deformation  
PH and Conductivity  
Water Absorption / Porosity  
Linear Shrinkage**

# NA-FLEX

## Soda Feldspar



### CHEMICAL ANALYSIS

Compound	Result%
SiO <sub>2</sub> %	70.3
Al <sub>2</sub> O <sub>3</sub> %	16.5
Fe <sub>2</sub> O <sub>3</sub> %	0.42
TiO <sub>2</sub> %	0.21
CaO%	0.52
MgO%	0.2
K <sub>2</sub> O%	0.25
Na <sub>2</sub> O%	10.1
Loss On Ignition%	0.55

### PHYSICAL PROPERTIES

Name of Test	Result
Shrinkage %	12.9
Loss on ignition %	0.55
L*	82.5
A*	1.1
B*	5.65
Temperature C	1208/1216
Cycle Min.	46

### ◆ Chemical Formula: NaAlSi<sub>3</sub>O<sub>8</sub>

KFLEX is fine-grained crystalline mineral, exhibiting a range of colors from white to pale yellow, pink, or light gray. Its surface may showcase a vitreous or pearly luster.

### ◆ Key Features:

- ▶ High Alumina Content
- ▶ Alkali Source
- ▶ Electrical Insulation
- ▶ Fluxing Agent
- ▶ Thermal Stability
- ▶ Mineral Filler

**Material Form:** Lumps / Powder / Chips

**Packing:** Loose / 50 kg Bag / Jumbo Bag

# K-FLEX

## Potash Feldspar



### CHEMICAL ANALYSIS

Compound	Result%
SiO <sub>2</sub> %	69.34
Al <sub>2</sub> O <sub>3</sub> %	17.31
Fe <sub>2</sub> O <sub>3</sub> %	0.09
TiO <sub>2</sub> %	0.02
CaO%	0.41
MgO%	0.09
K <sub>2</sub> O%	9.66
Na <sub>2</sub> O%	2.38

### PHYSICAL PROPERTIES

Name of Test	Result
Shrinkage %	13.96
L*	87.35
A*	1.25
B*	4.75
Whitness	69.82
Temperature C	1184/1188
Cycle Min.	50

### ◆ Chemical Formula: **KAlSi<sub>3</sub>O<sub>8</sub>**

K-FLEX Potash Feldspar is a type of feldspar that is used in the production of K-FLEX insulation materials. It is a white, granular mineral that is composed of potassium, aluminum, silicon, and oxygen.

### ◆ Key Features:

- ▶ Low Thermal Conductivity
- ▶ Chemical resistance
- ▶ High Fire Resistance
- ▶ Non-toxic

**Material Form:** Lumps / Powder / Chips

**Packing:** Loose / 50 kg Bag / Jumbo Bag

# BALL CLAY

RR-1



## PHYSICAL PROPERTIES

Name of Test	Result
Shrinkage %	10.39
Loss on ignition %	11.84
Dry M.O.R. kg/cm <sup>2</sup>	26.2
Fired M.O.R. kg/cm <sup>2</sup>	331.1
Water Absorption %	4.21
Water Of Plasticity %	33.4
T.D.S.	770
L*	74.28
A*	2.48
B*	11.77
Whitness	48.43
Temperature C	1184/1188
Cycle Min.	50

## CHEMICAL ANALYSIS

Compound	Result%
SiO <sub>2</sub> %	49.68
Al <sub>2</sub> O <sub>3</sub> %	32.08
Fe <sub>2</sub> O <sub>3</sub> %	1.54
TiO <sub>2</sub> %	1.04
CaO%	1.53
MgO%	0.48
K <sub>2</sub> O%	1.26
Na <sub>2</sub> O%	0.63
Loss On Ignition%	11.47

### ◆ Chemical Formula: Al<sub>2</sub>O<sub>3</sub>.2SiO<sub>2</sub>.2H<sub>2</sub>O

Ball Clay is a premium clay suitable for the fast firing of ceramics found in the western part of Rajasthan mainly in areas like Nagaur, Bikaner, and associated belt regions.

### ◆ Key Features:

- ▶ Low fired Water absorption
- ▶ High plasticity
- ▶ Low shrinkage
- ▶ high vitrification properties
- ▶ High strength
- ▶ White color

**Material Form:** Lumps / Powder / Chips

**Packing:** Loose / 50 kg Bag / Jumbo Bag



# BALL CLAY

RD-2



## PHYSICAL PROPERTIES

Name of Test	Result
Shrinkage %	9.94
Loss on ignition %	11.12
Dry M.O.R. kg/cm <sup>2</sup>	24.7
Fired M.O.R. kg/cm <sup>2</sup>	277.4
Water Absorption %	7.59
Water Of Plasticity %	33.4
T.D.S.	540
L*	74.51
A*	5.67
B*	11.12
Whitness	47.96
Temperature C	1184/1188
Cycle Min.	50

## CHEMICAL ANALYSIS

Compound	Result%
SiO <sub>2</sub> %	50.45
Al <sub>2</sub> O <sub>3</sub> %	32.52
Fe <sub>2</sub> O <sub>3</sub> %	1.81
TiO <sub>2</sub> %	1.22
CaO%	0.29
MgO%	0.48
K <sub>2</sub> O%	1.04
Na <sub>2</sub> O%	0.72
Loss On Ignition%	11.23

### ◆ Chemical Formula : Al<sub>2</sub>O<sub>3</sub>.2SiO<sub>2</sub>.2H<sub>2</sub>O

Ball Clay is a premium clay suitable for the fast firing of ceramics found in the western part of Rajasthan mainly in areas like Nagaur, Bikaner, and associated belt regions.

### ◆ Key Features:

- ▶ Low fired Water absorption
- ▶ High plasticity
- ▶ Low shrinkage
- ▶ high vitrification properties
- ▶ High strength
- ▶ White color

**Material Form:** Lumps / Powder / Chips

**Packing:** Loose / 50 kg Bag / Jumbo Bag

# WASHED POTASH



## CHEMICAL ANALYSIS

Compound	Result%
SiO <sub>2</sub> %	70.41
Al <sub>2</sub> O <sub>3</sub> %	16.21
Fe <sub>2</sub> O <sub>3</sub> %	0.09
TiO <sub>2</sub> %	0.02
CaO%	0.41
MgO%	0.09
K <sub>2</sub> O%	9.29
Na <sub>2</sub> O%	2.68
Loss On Ignition%	0.51

## PHYSICAL PROPERTIES

Name of Test	Result
Shrinkage %	13.4
L*	89.1
A*	0.2
B*	2.07
Whitness	68.72
Temperature C	1184/1188
Cycle Min.	50

### ◆ Chemical Formula :

Washed potash is a mineral that is composed of potassium carbonate. It is a white, granular powder that is typically found in evaporite deposits. Washed potash is a valuable resource that is used in a variety of applications, including fertilizer, Ceramic Industry.

### ◆ Key Features:

- ▶ High Purity
- ▶ Non-Toxic
- ▶ High Solubility
- ▶ Versatility

**Material Form:** Lumps / Powder / Chips  
**Packing:** Loose / 50 kg Bag / Jumbo Bag

# PEARL CLAY

China Clay 94



## PHYSICAL PROPERTIES

Name of Test	Result
Shrinkage %	4.02
Loss on ignition %	12.86
Dry M.O.R. kg/cm <sup>2</sup>	21.4
Fired M.O.R. kg/cm <sup>2</sup>	73.7
Water Absorption %	19.12
Water Of Plasticity %	34
T.D.S.	300
L*	93.86
A*	1.05
B*	4.46
Whitness	84.56
Temperature C	1184/1188
Cycle Min.	50

## CHEMICAL ANALYSIS

Compound	Result%
SiO <sub>2</sub> %	50.31
Al <sub>2</sub> O <sub>3</sub> %	32.02
Fe <sub>2</sub> O <sub>3</sub> %	1.13
TiO <sub>2</sub> %	1.05
CaO%	1.76
MgO%	0.32
K <sub>2</sub> O%	1.42
Na <sub>2</sub> O%	0.56
Loss On Ignition%	11.21

### ◆ Chemical Formula : Al<sub>2</sub>O<sub>3</sub>.2SiO<sub>2</sub>.2H<sub>2</sub>O

China Clay 94 is a type of kaolin, which is a naturally occurring clay mineral. It is used in a variety of applications, including paints, ceramics production.

### ◆ Key Features:

- Heat Resistant
- Good Binding Properties
- Versatile
- Non-toxic
- Fine particle size
- High whiteness

**Material Form:** Lumps / Powder / Chips

**Packing:** Loose / 50 kg Bag / Jumbo Bag

# PEARL CLAY

China Clay 95



## PHYSICAL PROPERTIES

Name of Test	Result
Shrinkage %	3.53
Loss on ignition %	11.25
Dry M.O.R. kg/cm <sup>2</sup>	20.4
Fired M.O.R. kg/cm <sup>2</sup>	69.4
Water Absorption %	19.83
Water Of Plasticity %	32.6
T.D.S.	330
L*	95.31
A*	0.59
B*	3.89
Whitness	87.76
Temperature C	1184/1188
Cycle Min.	50

## CHEMICAL ANALYSIS

Compound	Result%
SiO <sub>2</sub> %	55.08
Al <sub>2</sub> O <sub>3</sub> %	30.94
Fe <sub>2</sub> O <sub>3</sub> %	0.32
TiO <sub>2</sub> %	0.59
CaO%	0.41
MgO%	0.58
K <sub>2</sub> O%	0.06
Na <sub>2</sub> O%	0.29
Loss On Ignition%	11.48

### ◆ Chemical Formula : $Al_2O_3 \cdot 2SiO_2 \cdot 2H_2O$

China Clay 95 is a type of kaolin, which is a naturally occurring clay mineral. It is used in a variety of applications, including paints, ceramics production.

### ◆ Key Features:

- Heat Resistant
- Good Binding Properties
- Versatile
- Non-toxic
- Fine particle size
- High whiteness

**Material Form:** Lumps / Powder / Chips

**Packing:** Loose / 50 kg Bag / Jumbo Bag

# WHITE CLAY



## PHYSICAL PROPERTIES

Name of Test	Result
Shrinkage %	10.89
Loss on ignition %	13.25
Dry M.O.R. kg/cm <sup>2</sup>	22.4
Fired M.O.R. kg/cm <sup>2</sup>	147.9
Water Absorption %	10.33
Water Of Plasticity %	32.4
T.D.S.	280
L*	91.54
A*	0.03
B*	9.07
Whitness	78.82
Temperature C	1184/1188
Cycle Min.	50

## CHEMICAL ANALYSIS

Compound	Result%
SiO <sub>2</sub> %	48.75
Al <sub>2</sub> O <sub>3</sub> %	33.86
Fe <sub>2</sub> O <sub>3</sub> %	0.33
TiO <sub>2</sub> %	1.92
CaO%	0.34
MgO%	0.35
K <sub>2</sub> O%	2.12
Na <sub>2</sub> O%	0.82

### ◆ Chemical Formula:

White clay, also known as china clay, is a soft, white, earthy mineral that is used in a variety of applications, including ceramics, papermaking, and cosmetics. It is a type of kaolin, which is a group of clay minerals that are formed by the weathering of aluminum silicate rocks.

### ◆ Key Features:

- Chemical Inertness
- Plasticity
- Fire Resistance
- Versatile

**Material Form:** Lumps / Powder / Chips  
**Packing:** Loose / 50 kg Bag / Jumbo Bag

# BALL CLAY

A1 Clay



## CHEMICAL ANALYSIS

Compound	Result%
SiO <sub>2</sub> %	70.3
Al <sub>2</sub> O <sub>3</sub> %	16.5
Fe <sub>2</sub> O <sub>3</sub> %	0.42
TiO <sub>2</sub> %	0.21
CaO%	0.52
MgO%	0.2
K <sub>2</sub> O%	0.25
Na <sub>2</sub> O%	10.1
Loss On Ignition%	0.55

## PHYSICAL PROPERTIES

Name of Test	Result
Shrinkage %	12.9
Loss on ignition %	0.55
L*	82.5
A*	1.1
B*	5.65
Temperature C	1208/1216
Cycle Min.	46

### ◆ Chemical Formula:

Ball Clay is a premium clay suitable for fast firing of ceramics found in western part of Rajasthan mainly in areas like Nagaur, Bikaner and associated belt region, Low fired Water absorption and high vitrification properties is the key features of this clay

### ◆ Key Features:

- ▶ High Alumina Content
- ▶ Alkali Source
- ▶ Electrical Insulation
- ▶ Fluxing Agent
- ▶ Thermal Stability
- ▶ Mineral Filler

**Material Form:** Lumps / Powder / Chips

**Packing:** Loose / 50 kg Bag / Jumbo Bag

## ◆ CONTACT INFO



**TOUCH** The Icons for Action.

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