



## SUPERIOR ALUMINA

WE ARE COMMITTED TO OFFERING THE BEST YOU DESERVE

### *Reactive Alumina*

### *Product Information*

## 1 Description

Reactive alumina as a basic component of shaped and unshaped refractories are produced into a series of different grain size distribution of reactive alumina powder by ball mills process. A large products portfolio can be provided that are classified by calcination degrees, different soda contents and sizes.

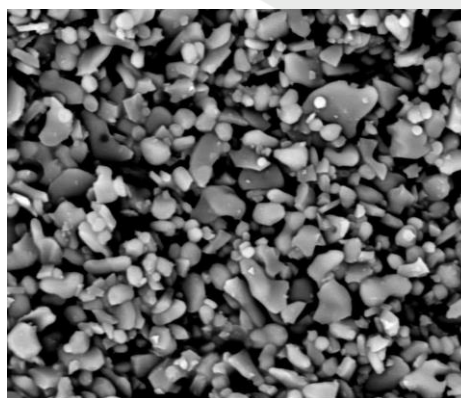
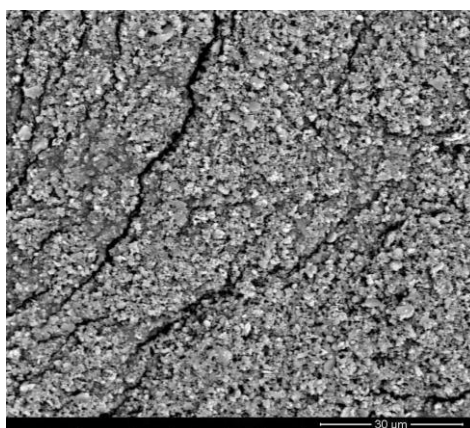
Our reactive alumina as a matrix of refractory has low open porosity, excellent sinter reactivity, high purity, water demand reduction, low dilatants for optimizing refractories performance.

## 2 Application

Our Range of reactive alumina are widely used in refractory bricks, nozzles, castables, drying agent etc.



## 3 Product Picture



## 4 Packaging and Storage

Convenient packages of 25kg paper/plastic woven bag as well as 1mt bulk bag are available. Other customized packages are provided upon request.

For best product performance and longer shelf life, re-packing is not recommended.



## 5 Chemical & Physical Properties

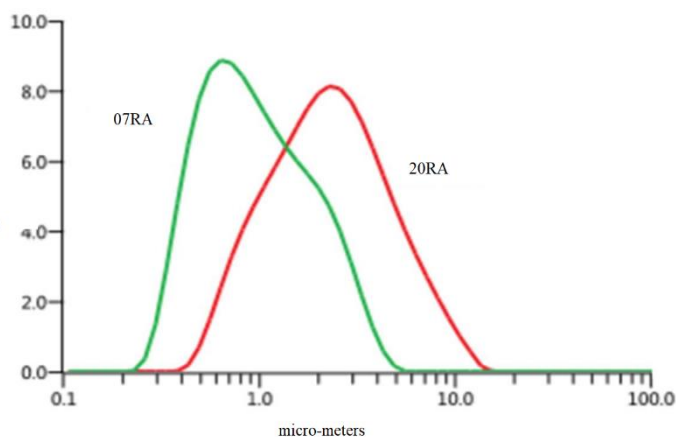
### Mono-Modal Reactive Alumina

Item		07RA		15RA		20RA	
Chemical Composition*		Typical	Min./Max.	Typical	Min./Max.	Typical	Min./Max.
Al <sub>2</sub> O <sub>3</sub>	[%]	99.2	≥99.0	99.2	≥99.0	99.2	≥99.0
Na <sub>2</sub> O	[%]	0.37	≤0.45	0.32	≤0.45	0.37	≤0.45
SiO <sub>2</sub>	[%]	0.08	≤0.15	0.08	≤0.15	0.08	≤0.15
Fe <sub>2</sub> O <sub>3</sub>	[%]	0.05	≤0.15	0.05	≤0.15	0.05	≤0.15
Physical properties**		Typical	Min./Max.	Typical	Min./Max.	Typical	Min./Max.
D50	[um]	0.8	≤1.1	1.5	≤2.0	2.3	≤3.0
BET***	[m <sup>2</sup> /g]	3.5	≥2.0	3.1	≥1.0	1.5	≥1.0

\*: Chemical test is based on X-Ray Fluorescence from Thermal Science.

\*\*: Physical test is based on Mastersizer 3000

\*\*\*: BET test is based on Micromeritics Gemini VII 2390



The above-mentioned data represent standard values obtained from our current production line. Guarantees with respect of these data are only valid if agreed upon in writing. We reserve the right to make alterations due to technical developments.



## 6 Chemical & Physical Properties

### Mono-Modal Reactive Alumina (Low Soda)

Item		05RAL		07RAL		15RAL		20RAL	
Chemical Composition*		Typical	Min./Max.	Typical	Min./Max.	Typical	Min./Max.	Typical	Min./Max.
Al <sub>2</sub> O <sub>3</sub>	[%]	99.2	≥99.0	99.2	≥99.0	99.2	≥99.0	99.2	≥99.0
Na <sub>2</sub> O	[%]	0.07	≤0.15	0.07	≤0.15	0.07	≤0.15	0.07	≤0.15
SiO <sub>2</sub>	[%]	0.08	≤0.15	0.08	≤0.15	0.08	≤0.15	0.08	≤0.15
Fe <sub>2</sub> O <sub>3</sub>	[%]	0.05	≤0.15	0.05	≤0.15	0.05	≤0.15	0.05	≤0.15
Physical Properties**		Typical	Min./Max.	Typical	Min./Max.	Typical	Min./Max.	Typical	Min./Max.
D50	[um]	0.6	≤0.8	0.9	≤1.2	1.5	≤2.0	2.1	≤3.0
BET***	[m <sup>2</sup> /g]	7.6	≥4.0	6.5	≥4.0	1.9	≥1.0	1.5	≥1.0

\*: Chemical test is based on X-Ray Fluorescence from Thermal Science.

\*\*: Physical test is based on Mastersizer 3000

\*\*\*: BET test is based on Micromeritics Gemini VII 2390

The above-mentioned data represent standard values obtained from our current production line. Guarantees with respect of these data are only valid if agreed upon in writing. We reserve the right to make alterations due to technical developments.



## 7 Chemical & Physical Properties

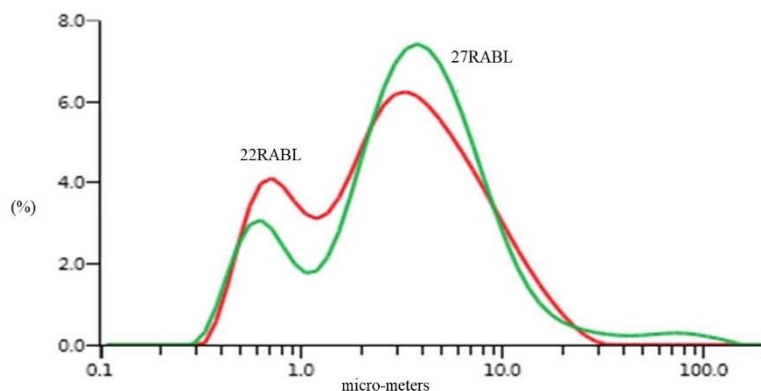
### Bi-Modal and Multi-Modal Reactive Alumina

Item		13RABL		22RABL		27RABL		15RAM	
Chemical Composition*		Typical	Min./Max.	Typical	Min./Max.	Typical	Min./Max.	Typical	Min./Max.
Al <sub>2</sub> O <sub>3</sub>	[%]	99.2	≥99.0	99.2	≥99.0	99.2	≥99.0	99.2	≥99.0
Na <sub>2</sub> O	[%]	0.08	≤0.15	0.08	≤0.15	0.08	≤0.15	0.15	≤0.15
SiO <sub>2</sub>	[%]	0.07	≤0.15	0.07	≤0.15	0.07	≤0.15	0.08	≤0.15
Fe <sub>2</sub> O <sub>3</sub>	[%]	0.05	≤0.15	0.05	≤0.15	0.05	≤0.15	0.05	≤0.15
Physical Properties**		Typical	Min./Max.	Typical	Min./Max.	Typical	Min./Max.	Typical	Min./Max.
D50	[um]	1.3	≤2.0	2.2	≤3.0	2.7	≤4.0	2.1	≤3.0
BET***	[m <sup>2</sup> /g]	4.3	≥3.0	3.7	≥2.0	3.1	≥1.0	3.8	≥2.0
Size distribution		Bi-Modal		Bi-Modal		Bi-Modal		Multi-Modal	

\*: Chemical test is based on X-Ray Fluorescence from Thermal Science.

\*\*: Physical test is based on Mastersizer 3000

\*\*\*: BET test is based on Micromeritics Gemini VII 2390



The above-mentioned data represent standard values obtained from our current production line. Guarantees with respect of these data are only valid if agreed upon in writing. We reserve the right to make alterations due to technical development.