



ALMATIS

PREMIUM ALUMINA



Global Product Data

## T-162 Tabular Alumina Balls



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GP-RCP/016/R01/1207/MSDS 154



# T-162 Tabular Alumina Balls

## Product Characteristics

T-162 Tabular Alumina Balls are high-purity sintered alpha-alumina spheres (in various sizes). This product has been fired at extremely high temperatures ( $>1900^{\circ}\text{C}$ ) to reduce porosity to a very low level. This high-temperature process leads the growth of large plate-like (or tablet-like) alpha-alumina crystals giving "tabular" alumina its name. T-162 Tabular Alumina Balls are carefully selected before packaging for size control, roundness and smooth surface. Some chipped, broken, oblong and rough surface balls may be present in all sizes.

## Product Applications

T-162 Tabular Alumina Balls have been used since the 1950s for heat exchange media (so-called pebble heaters) and metal filtration. The properties of smooth surface, chemical inertness, high chemical purity and superior thermal and mechanical shock resistance are crucial to the excellent performance of T-162 in these applications.

# T-162 Tabular Alumina Balls

Chemical Composition [wt %]		Typical
Al <sub>2</sub> O <sub>3</sub> by difference		99.7
SiO <sub>2</sub>		0.02
Fe <sub>2</sub> O <sub>3</sub>		0.02
Na <sub>2</sub> O		0.20
Physical Properties		
Specific Gravity		3.65
Apparent Porosity [%]		1.5
Water Absorption [%]		0.4
Packed Bulk Density [kg/m <sup>3</sup> ]	2160 (for 3/16") to 2000 (for 1")	
Cold Crushing Strength [N]	2900 (for 3/16") to 14700 (for 1")	

Sizes	Nom. Diameter	Size Distribution		
		10 % max.	80 % min.	10 % max.
1 inch	25 mm	+ 26.5 mm	26.5 – 23.5 mm	– 23.5 mm
3/4 inch	19 mm	+ 20.0 mm	20.0 – 18.0 mm	– 18.0 mm
1/2 inch	13 mm	+ 14.0 mm	14.0 – 12.0 mm	– 12.0 mm
3/8 inch	11 mm	+ 12.0 mm	12.0 – 10.0 mm	– 10.0 mm
5/16 inch	8 mm	+ 9.0 mm	9.0 – 7.0 mm	– 7.0 mm
1/4 inch	6.4 mm	+ 7.0 mm	7.0 – 5.5 mm	– 5.5 mm
3/16 inch	4.8 mm	+ 5.5 mm	5.5 – 4.0 mm	– 4.0 mm

All data are based upon Almatis standard test methods.

The typical properties are based upon the actual averages from production data.

## Standard Packaging

- 25 kg paper bags
- 1000 kg bulk bags



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