Global Product Data

ALMATIS

# Tabular Alumina T60/T64*

* T60: Product name in all countries except North America (T64)

# Tabular Alumina T60/T64*

| Chemical Composition | Unit | All Sizes[1] | -45 micron LI | -45 micron STD | -20 micron |
|---|---|---|---|---|---|
| $Al_2O_3$ by difference (typical) | [%] | 99.5 | 99.5 | 99.1 | 99.3 |
| $Na_2O$ | [%] | ≤ 0.40 | ≤ 0.40 | ≤ 0.60 | ≤ 0.40 |
| $SiO_2$ | [%] | ≤ 0.09 | ≤ 0.09 | ≤ 0.12 | ≤ 0.15 |
| Fe Magnetic | [%] | ≤ 0.02 | ≤ 0.02 | ≤ 0.30 | ≤ 0.02 |

| Physical Properties | Unit | All Sizes |
|---|---|---|
| Bulk Specific Gravity | [g/cm3] | ≥ 3.50 |
| Apparent Porosity | [%] | ≤ 5 |
| Water Absorption | [%] | ≤ 1.5 |

All data are based upon Almatis standard test methods. All test methods are available upon request.
1) All sizes excluding - 45 micron LI, - 45 micron STD and - 20 micron

## Open Sizes – Particle Size Distribution

| DIN[2] [mm] | Tyler[3] [mesh] | Unit | Typ. | Min. | Max. |
|---|---|---|---|---|---|
| **0 - 3 mm (- 6 mesh)** | | | | | |
| + 3.35 mm | 6 | [%] | 1 | 0 | 8 |
| + 2.0 mm | 9 | [%] | 32 | | |
| + 1.0 mm | 16 | [%] | 29 | | |
| - 0.125 mm | 115 | [%] | 7 | 1 | 21 |
| **0 - 1 mm (- 14 mesh)** | | | | | |
| + 1.4 mm | 12 | [%] | 1 | 0 | 2 |
| + 1.0 mm | 16 | [%] | 11 | | |
| + 0.5 mm | 32 | [%] | 36 | | |
| - 0.106 mm | 150 | [%] | 14 | 5 | 26 |
| **0 - 0.5 mm (- 28 mesh)** | | | | | |
| + 0.71 mm | 24 | [%] | 1 | 0 | 3 |
| + 0.5 mm | 32 | [%] | 14 | | |
| + 0.25 mm | 60 | [%] | 37 | | |
| - 0.045 mm | 325 | [%] | 9 | 2 | 20 |
| **0 - 0.3 mm (- 48 mesh)** | | | | | |
| + 0.3 mm | 48 | [%] | 1 | 0 | 5 |
| + 0.25 mm | 60 | [%] | 3 | | |
| + 0.125 mm | 115 | [%] | 29 | | |
| - 0.045 mm | 325 | [%] | 29 | 15 | 45 |

| DIN[2] [mm] | Tyler[3] [mesh] | Unit | Typ. | Min. | Max. |
|---|---|---|---|---|---|
| **0 - 0.2 mm (- 65 mesh)** | | | | | |
| + 0.212 mm | 65 | [%] | 3 | 0 | 5 |
| + 0.125 mm | 115 | [%] | 12 | | |
| + 0.063 mm | 250 | [%] | 38 | | |
| - 0.045 mm | 325 | [%] | 41 | 25 | 55 |
| **- 45 micron LI (- 325 mesh LI)** | | | | | |
| + 0.063 mm | 250 | [%] | 0 | 0 | 1 |
| - 0.045 mm | 325 | [%] | 99 | 95 | 100 |
| **- 45 micron STD (- 325 mesh STD)** | | | | | |
| + 0.063 mm | 250 | [%] | 0 | 0 | 2 |
| - 0.045 mm | 325 | [%] | 98 | 95 | 100 |
| **- 20 micron** | | | | | |
| + 0.020 mm[4] | 635 | [%] | 5 | 0 | 10 |
| Particle Size D50[5] | | [µm] | 3.7 | | 5.0 |

2) Sieve analysis as per DIN/ISO 3310/1
3) Sieve analysis as per Tyler Screen Scale
4) Wet -20 micron sieve
5) Laser granulometry Bettersizer S3 Almatis global standard

The typical product properties are based upon the actual averages from product data. The Min/Max data show our standard product specification data for these products.
All data are based upon Almatis standard test methods. All test methods are available upon request.
Other sizes are available upon request.

# Tabular Alumina T60/T64*

## Closed Sizes – Particle Size Distribution

| DIN[1] [mm] | Tyler[2] [mesh] | Unit | Typ. | Min. | Max. |
|---|---|---|---|---|---|
| **3 - 6 mm (3 - 6 mesh)** | | | | | |
| + 6.3 mm | 1/4 inch[3] | [%] | 1 | 0 | 4 |
| + 5.0 mm | - | [%] | 22 | | |
| + 4.0 mm | 5 | [%] | 40 | | |
| - 2.0 mm | 9 | [%] | 1 | 0 | 3 |
| **2 - 5 mm (1/4 inch - 8 mesh)** | | | | | |
| + 6.3 mm | 1/4 inch[3] | [%] | 1 | 0 | 3 |
| + 5.0 mm | - | [%] | 14 | | |
| + 4.0 mm | 5 | [%] | 31 | | |
| - 2.0 mm | 9 | [%] | 2 | 0 | 6 |
| **1 - 3 mm (6 - 14 mesh)** | | | | | |
| + 4.0 mm | 5 | [%] | 1 | 0 | 2 |
| + 3.35 mm | 6 | [%] | 4 | | |
| + 2.0 mm | 9 | [%] | 52 | | |
| - 1.0 mm | 16 | [%] | 2 | 0 | 10 |
| **1 - 2 mm or 8 - 14 mesh** | | | | | |
| + 3.35 mm | 6 | [%] | 1 | 0 | 1 |
| + 2.0 mm | 9 | [%] | 11 | | |
| + 1.4 mm | 12 | [%] | 56 | | |
| - 1.0 mm | 16 | [%] | 3 | 0 | 10 |

| DIN[1] [mm] | Tyler[2] [mesh] | Unit | Typ. | Min. | Max. |
|---|---|---|---|---|---|
| **0.5 - 1 mm (14 - 28 mesh)** | | | | | |
| + 1.4 mm | 12 | [%] | 1 | 0 | 2 |
| + 1.0 mm | 16 | [%] | 19 | | |
| + 0.71 mm | 24 | [%] | 50 | | |
| - 0.5 mm | 32 | [%] | 4 | 0 | 10 |
| **0.2 - 0.6 mm (28 - 48 mesh)** | | | | | |
| + 0.71 mm | 24 | [%] | 1 | 0 | 2 |
| + 0.5 mm | 32 | [%] | 11 | | |
| + 0.25 mm | 60 | [%] | 81 | | |
| - 0.212 mm | 65 | [%] | 3 | 0 | 7 |

1) Sieve analysis as per DIN/ISO 3310/1
2) Sieve analysis as per Tyler Screen Scale
3) ASTM E-11 (inch)

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Global Product Data

# Tabular Alumina T60/T64*

## Global Packaging

| | Bags 25 kg | Bags 50 lbs | Big bags 1.0 mt | Big bags 2.0 mt | Big bags 4000 lbs | Bulk shipments |
|---|---|---|---|---|---|---|
| Americas | | • | | | • | • |
| Asia | • | | • | | | |
| Europe | • | | | • | | • |

* T60: Product name in all countries except North America (T64)

## Product Description

Almatis Tabular Alumina T60/T64 is a pure sintered α-alumina material that has been fully densified by rapid-sintering without the use of sintering aids at temperatures in excess of 1800°C. Tabular Alumina has characteristic large, well developed hexagonal tablet shaped α-alumina crystals of up to 200 µm length. The excellent thermal volume stability and thermal shock characteristics can be attributed to its specific microstructure: low open porosity and large crystals with closed spherical pores, which are entrapped upon re-crystallization during rapid sintering. Tabular alumina has extremely high refractoriness, high mechanical strength and abrasion resistance, very good chemical purity, excellent dielectric properties and good resistance against acid and alkali corrosion.

Tabular Alumina is the aggregate of choice in unshaped and shaped high-performance refractories. It is used in a variety of industries such as steel, foundry, cement, petrochemical, ceramic and waste incineration. Other common applications include its use in electrical insulators, kiln furniture and as a catalyst support. Ground Tabular is an excellent product to be used as a filler in epoxy or resin systems where high dielectric strength, thermal conductivity or abrasion resistance is desired.

Contact for sales, technical information and application assistance

**Head Office**
Almatis GmbH
Lyoner Straße 9
60528 Frankfurt/Germany

info@almatis.com
www.almatis.com

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