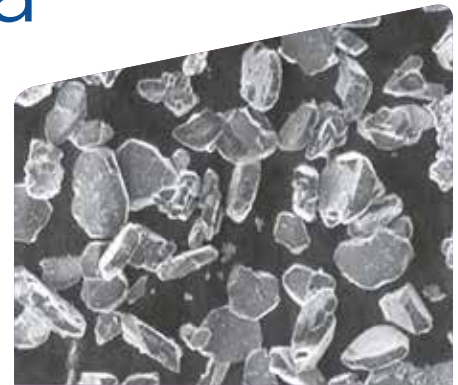




ENGINEERED PARTICLES / CALCINED ALUMINA

Industrial Grade Precision Alumina

Saint-Gobain's 7290 Industrial Grade Precision Alumina is manufactured from high-quality calcined alumina that is classified to achieve tightly sized distributions. The single-crystal alumina platelets lay flat during lapping to provide extremely high cut rates and lower surface roughness values when compared to both fused aluminum oxide and competitive calcined aluminas. Our engineered classifying equipment ensures a product with controlled and reproducible sizing.



PHYSICAL CHARACTERISTICS

| | |
|------------------|-------------------------------|
| Crystal Form | Monocrystalline Alpha Alumina |
| Shape | Hexagonal Platelets |
| Hardness | Knoop — 2000 |
| pH | 9.0-10.5 |
| Specific Gravity | 3.95 gm/cc |

APPLICATIONS

- Metal Lapping
- Metal Polishing
- Coated Mylar Tape

CHEMICAL CHARACTERISTICS

| | |
|--------------------------------|-------------|
| Al ₂ O ₃ | 98.70% min. |
| SiO ₂ | 0.06% max. |
| Fe ₂ O ₃ | 0.03% max. |
| Na ₂ O | 1.00% max. |
| TiO ₂ | 0.02% max. |
| CaO | 0.07% max. |
| MgO | 0.05% max. |



ENGINEERED PARTICLES / CALCINED ALUMINA

Industrial Grade Precision Alumina

Typical size distributions are shown below. Our ISO-certified manufacturing and classification process ensures narrow particle size distributions and superior coarse grain control.

| IGPA PRODUCT SIZING | | | |
|---------------------|---------------------|-----------------|----------------------|
| IGPA | d ³ max. | d ⁵⁰ | d ⁹⁴ min. |
| 3.0 | 10.0 | 2.50 - 3.50 | 1.0 |
| 5.0 | 12.0 | 3.50 - 4.50 | 1.5 |
| 9.0 | 15.0 | 5.50 - 6.50 | 2.5 |
| 12.0 | 18.0 | 7.50 - 8.50 | 4.0 |
| 15.0 | 20.0 | 10.50 - 11.50 | 6.0 |
| 18.0 | 22.0 | 11.50 - 12.75 | 7.0 |
| 20.0 | 24.0 | 12.75 - 14.00 | 8.0 |
| 22.0 | 30.0 | 14.00 - 16.00 | 8.5 |
| 25.0 | 34.0 | 16.00 - 18.00 | 9.0 |
| 30.0 | 38.0 | 20.00 - 23.0 | 12.0 |

Saint-Gobain Surface Conditioning

1 New Bond Street, Box #15137, Worcester, MA 01615-0137

Tel: 508-795-5000



ISO
CERTIFIED
9001: 2015 and
14001: 2015

surfaceconditioning.saint-gobain.com

Saint-Gobain Surface Conditioning believes that the data contained herein is factual and the opinions expressed are those of qualified experts. The data should not be taken as a warranty or representation for which Saint-Gobain Surface Conditioning assumes legal responsibility. Rather it is offered solely for the consideration, investigation and verification of the user. Any use of this information and data must be determined by the user in accordance with federal, state and local laws and regulations.

SURFACE CONDITIONING

©2017 Saint-Gobain Surface Conditioning, XX000X-12/17-HIVE

