

FEATURES & BENEFITS

GRANUSIL® Mineral Filler is produced from high-purity industrial quartz sand for a wide variety of industrial and contractor mixed applications which need a reliable silica contribution or require a chemically inert structural filler. Consistently uniform grain shapes and particle size distributions offer excellent placement, compaction and mechanical properties. High silica content combined with low level soluble ions, alkalis and alkaline oxides provide non-reactive service in most corrosive and exposed environments.

These durable monocrystalline structures resist abrasion in high traffic-excessive wear applications and provide the stability formulators seek in high solids emulsions, elastomerics, cemented and modified cementitious systems. GRANUSIL is the preferred structural component in systems ranging from polymerized floor overlays to artificial sports turf.

All GRANUSIL grades are processed and sized under rigid Covia QIPSM statistical and quality assurance programs. The result is chemical purity and consistently uniform particle size distributions for predictable performance in either manufactured or site-prepared products.

PARTICAL SIZE ANALYSIS

Typical Mean Values. These Do Not Represent a Specification.

| | Mesh Size | | GRANUSIL® Grades | | | | | | | |
|--|-----------|---------|------------------|------|------|------|------|------|------|------|
| | ASTM | MICRONS | 2095 | 2070 | 2040 | 4095 | 4075 | 4060 | 4045 | 4020 |
| Typical mean % retained on individual sieves | 12 | 1700 | 3.3 | 1.2 | — | — | — | — | — | — |
| | 14 | 1400 | 15.1 | 7.2 | — | — | — | — | — | — |
| | 16 | 1180 | 28.3 | 14.9 | 1.5 | — | — | — | — | — |
| | 18 | 1000 | 26.4 | 19.7 | 13.0 | 0.1 | — | — | — | — |
| | 20 | 850 | 14.8 | 19.6 | 27.1 | 2.2 | 0.94 | 0.2 | — | — |
| | 25 | 707 | 7.6 | 18.4 | 30.2 | 20.7 | 7.4 | — | — | — |
| | 30 | 600 | 2.8 | 11.7 | 19.0 | 41.8 | 12.9 | 9.3 | 1.4 | 0.8 |
| | 35 | 500 | 0.9 | 5.4 | 7.4 | 27.0 | — | — | — | — |
| | 40 | 425 | 0.3 | 1.2 | 1.4 | 6.9 | 48.4 | 53.9 | 62.5 | 13.2 |
| | 50 | 300 | 0.2 | 0.5 | 0.3 | 1.0 | 20.9 | 24.3 | 27.0 | 29.5 |
| | 70 | 212 | 0.1 | 0.1 | 0.1 | 0.1 | 6.6 | 9.6 | 6.7 | 30.9 |
| | 100 | 150 | — | — | — | — | 2.0 | 1.9 | 1.7 | 16.9 |
| | 140 | 106 | — | — | — | — | 0.6 | 0.4 | 0.5 | 6.8 |
| | 200 | 75 | — | — | — | — | — | — | 0.1 | 1.5 |
| | 270 | 53 | — | — | — | — | — | — | 0.06 | 0.2 |
| PAN | PAN | 0.1 | 0.09 | 0.1 | 0.1 | 0.33 | 0.07 | 0.03 | tr | |

PHYSICAL PROPERTIES

Typical Mean Values. These Do Not Represent a Specification.

| GRANUSIL® Mineral Filler | | |
|----------------------------------|------------|-------------|
| Grain Shape | Subangular | Visual |
| Hardness (Mohs) | 7.0 | Moh's Scale |
| Moisture Content (%) | <0.1 | ASTM C-566 |
| Specific Gravity (g/cm³) | 2.65 | ASTM C-128 |
| Bulk Density, loose (lb/ft³) | 92-95 | ASTM C-29 |
| Bulk Density, compacted (lb/ft³) | 98-100 | ASTM C-29 |

CHEMICAL ANALYSIS

Typical Mean Values. These Do Not Represent a Specification.

| | Typical Mean Percent by Weight | | | | | |
|--|--------------------------------|--------|--------|--------|--------|-------|
| | 2095 | 2070 | 2040 | 4095 | 4045 | 4020 |
| Silicon Dioxide (SiO ₂) | 99.73 | 99.72 | 99.71 | 99.7 | 99.37 | 99.83 |
| Iron Oxide (Fe ₂ O ₃) | 0.085 | 0.079 | 0.073 | 0.067 | 0.198 | 0.017 |
| Aluminum Oxide (Al ₂ O ₃) | 0.109 | 0.111 | 0.114 | 0.102 | 0.214 | 0.12 |
| Calcium Oxide (CaO) | 0.003 | 0.003 | 0.003 | 0.0033 | 0.005 | tr |
| Titanium Dioxide (TiO ₂) | 0.009 | 0.009 | 0.009 | 0.008 | 0.081 | 0.01 |
| Magnesium Oxide (MgO) | <0.009 | <0.009 | <0.009 | <0.009 | 0.013 | <0.01 |
| Potassium Oxide (K ₂ O) | 0.004 | 0.005 | <0.005 | 0.004 | 0.004 | <0.01 |
| Sodium Oxide (Na ₂ O) | <0.1 | <0.1 | 0.009 | <0.009 | <0.009 | <0.01 |
| Loss on Ignition (LOI) | 0.084 | 0.076 | 0.068 | 0.090 | 0.112 | 0.05 |

| | PPM | | | | | |
|------------------------------------|-----|---|---|---|---|------|
| Nickel Oxide (NiO) | — | — | — | — | — | <1.0 |
| Chromium Oxide (Cr ₂ O) | — | — | — | — | — | 1.0 |
| Manganese (Mn) | — | — | — | — | — | 1.2 |

SHIPPING/ORDERING INFORMATION

- Shipping Point: Junction City, GA
- Originating Carrier: CSX Rail Systems
- Availability: Bulk, IBC, 100lb and 50 lb paper bags
Truck and Rail

CUSTOMER SERVICE

US & Canada: 1-800-243-9004

Fax: 1-800-243-9005

Worldwide: 1-203-442-2500

Fax: 1-203-972-1378

3 Summit Park Drive, Suite 700, Independence, OH 44131 | CoviaCorp.com

GRADE NUMBERS INDICATE RELATIVE VALUES OR RESULTS. THEY ARE NOT A SPECIFICATION OR WARRANTY OF PERFORMANCE.

HEALTH HAZARD WARNING: Prolonged inhalation of dust associated with the materials described in this data sheet can cause delayed lung injury including Silicosis, a progressive, disabling and sometimes fatal lung disease. IARC and NTP have determined that crystalline silica can cause lung cancer in humans Risk of injury is dependent on the duration and level of exposure. Follow OSHA or other relevant safety and health standards for the form of crystalline silica called Quartz. Current safety data sheet, containing safety information, is available and should be consulted before usage.

Notice: While information contained herein is correct to the best of our knowledge, Covia hereby disclaims any warranties as to the accuracy of the same. Recommendations or suggestions are made without guarantee or representation as to result, since conditions of usage are beyond our control. All materials are sold subject to Covia's standard terms and conditions of sale and the condition that buyer shall make his own tests to determine the suitability of such product for buyer's purpose. No statement contained herein shall be construed as a recommendation to infringe any patent.

Silica/Silica Containing

COVIA and GRANUSIL® are trademarks of Covia Holdings Corporations and/or its subsidiaries. All rights reserved.

