

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, 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

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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.

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Silica/Silica Containing

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