TECHNICAL DATA

Granusil®
MINERAL FILLERS

FEATURES AND BENEFITS

OTTAWA, MN

GRANUSIL® Mineral Fillers are produced from high purity industrial quartz sands 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 cementious 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 SPC and UNIMIN QIP℠ 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.

PARTICLE SIZE ANALYSIS AND PROPERTIES

Mean Values. These Do Not Represent A Specification.

	Mesh ASTM E-11	4095	4075	4060	4030	4020	5020	5010	7020
	16	---	---	---	---	---	---	---	---
Typical Mean %	20	1.2	0.4	0.3	---	---	---	---	---
Retained on	30	36.1	29.0	11.4	0.1	---	---	---	---
Individual	40	57.2	55.5	40.2	22.5	18.1	2.4	0.4	0.1
Sieves	50	5.1	12.0	30.6	54.7	35.8	19.9	12.2	1.2
	70	---	---	10.1	17.4	29.1	37.2	30.9	24.1
	100	---	---	---	4.2	12.4	26.5	32.8	42.7
	140	---	---	---	0.9	3.8	11.0	17.7	23.5
	200	---	---	---	---	0.8	2.7	5.3	7.2
	270	---	---	---	---	---	0.3	0.7	1.1
	PAN	0.4	3.1	7.4	0.2	---	---	---	0.1

Grain Shape	Rounded	Visual
Hardness	7.0 Mohs	Mohs Scale
Moisture Content	<0.1%	ASTM C-566
Specific Gravity	2.65 g/cm^3	ASTM C-128
Bulk Density, aerated	92-95 lb/ft^3	ASTM C-29
Bulk Density, compacted	98-100 lb/ft^3	ASTM C-29

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CHEMICAL ANALYSIS

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	Mean Percent by Weight
Silicon Dioxide (SiO_2)	99.692
Iron Oxide (Fe_2O_3)	.038
Aluminum Oxide (Al_2O_3)	.073
Calcium Oxide (CaO)	.014
Titanium Dioxide (TiO_2)	.006
Magnesium Oxide (MgO)	.012
Potassium Oxide (K_2O)	.020
Sodium Oxide (Na_2O)	.005
Loss on Ignition (LOI)	.121

ORDERING INFORMATION

Shipping Point: OTTAWA, MN
ORIGINATING CARRIER: UNION PACIFIC (UP)

Availability: BULK, 50# AND 100# PAPER BAGS, AND IBC'S
TRUCK AND RAIL

UNIMIN

FOR PRODUCT INFORMATION AND CUSTOMER SERVICE:
U.S. and CANADA 800-243-9004 · FAX 800-243-9005
WORLDWIDE 203-966-1306 · FAX 203-972-1378

UNIMIN CORPORATION

Silica Sands • Ground Silica Feldspar • Ball Clay • Kaolin • Nepheline Syenite • High Purity Quartz • Olivine • Microcrystalline Silica • Bentonite Clay • Dolomite

GRADE NUMBERS INDICATE RELATIVE VALUES OR RESULTS. THEY ARE NOT A SPECIFIATION OR WARRANTY OF PERFORMANNCE.

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 has determined that crystalline silica, inhaled from occupational sources, can cause 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 material safety data sheets, containing safety information, is available and should be consulted before usage.

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Silica/Silica Containing

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