

FEATURES AND BENEFITS

NEPHTON, ONTARIO

MINEX[®] industrial grade functional fillers and extenders add performance and value across a broad spectrum of applications. In coatings formulations, these materials impart many of the benefits of micronized MINEX grades, such as tint retention, weatherability, and abrasion resistance, while adding texture, traction properties, and gloss control. MINEX coarse fillers are easily dispersed in all conventional vehicle systems, and low resin demand facilitates high loading levels. These mineral extenders also improve structural and mechanical properties in elastomeric, adhesive, sealant, cemented, and polymer modified cementitious systems. Consistently uniform grain shapes and size distributions produce compressive strength and thermal stability in a variety of self-leveling and troweled coating and overlay systems.

MINEX[®] fillers are produced from nepheline syenite; a naturally occurring, silica deficient, sodium-potassium alumina silicate. Automated scanning electron microscopy confirms that MINEX contains less than one-tenth of one percent crystalline silica. No free crystalline silica is detectable in the mineral complex. All MINEX grades are processed and sized with rigid adherence to UNIMIN's QIPSM quality assurance programs. Consistently uniform chemistries, size distributions, and top size controls ensure improved structural and chemical performance with minimal resin demand.

PARTICLE SIZE ANALYSIS AND PROPERTIES

INDUSTRIAL GRADES

Mean Values. These Do Not Represent A Specification.

	Mesh		IG-16	IG-20	IG-25	IG-35	IG-40	IG-50	IG-56	IG-60
	ASTM	Microns								
Typical Mean % Retained on Individual Sieves	16	1.18mm	15.0	---	---	---	---	---	---	---
	20	850	41.5	0.9	0.1	---	---	---	---	---
	25	710	---	14.1	4.2	---	---	---	---	---
	30	600	41.1	40.7	41.5	0.1	0.1	---	---	---
	40	425	2.4	42.3	52.7	8.8	10.2	0.4	0.7	0.6
	50	300	---	2.0	1.5	30.2	29.9	23.8	---	---
	100	150	---	---	---	48.1	47.6	55.4	26.5	39.6
	200	75	---	---	---	10.8	9.7	18.0	43.4	33.6
	<200	<75	---	---	---	2.0	2.6	2.4	29.4	26.2
Median Particle Size (μ)	Sieve Data		900	600	550	268	265	225	125	120
Specific Gravity (g/cm ³)	2.61		ASTM C-128							
Melting Point (°F/°C)	1868/1020		ASTM C-24							
Bulk Density (lb/ft ³)	83-95		ASTM C-29							
pH	9.7		AFS 113-87-S							
Hardness	6.0		Moh's Scale							
Moisture %	.04		ASTM C-566							
Refractive Index	1.51-1.53		ASTM D-801							
Specific Resistance (ohm-cm)	3000		ASTM D-2448							

* % Finer and Brightness cannot be measured on coarsest grades

CHEMICAL ANALYSIS

Mean Values. These Do Not Represent A Specification.

Mean Percent by Weight

	<u>16,20</u>	<u>25</u>	<u>40</u>	<u>35,50,56</u>	<u>60</u>
Silicon Dioxide (SiO ₂)	58.30	60.20	59.90	60.00	58.85
Aluminum Oxide (Al ₂ O ₃)	23.40	23.40	23.40	23.50	23.50
Iron Oxide (Fe ₂ O ₃)	1.70	0.15	0.30	0.10	1.10
Calcium Oxide (CaO)	0.51	0.40	0.50	0.38	0.51
Magnesium Oxide (MgO)	0.02	0.02	0.03	0.02	0.03
Sodium Oxide (Na ₂ O)	10.30	10.40	10.30	10.50	10.30
Potassium Oxide (K ₂ O)	5.10	5.00	5.00	5.00	5.20
Loss on Ignition (L.O.I.)	0.67	0.43	0.57	0.42	0.51

These oxides exist in a complex of Albite, Microcline, and Nepheline. There is no free crystalline silica present.

ORDERING INFORMATION

Shipping Point: NEPHTON/BLUE MOUNTAIN ONTARIO, CANADA
ORIGINATING CARRIER: CANADIAN PACIFIC (CP RAIL)

Availability: 50 LB. BAGS, INTERMEDIATE BULK BAGS AND BULK
CONTACT US FOR SPECIFIC AVAILABILITY



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

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

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

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