

FEATURES & BENEFITS

MATRIX® glassy phase promoters are produced from nepheline syenite, a naturally occurring sodium potassium alumina silicate. The higher contribution of alumina, alkalis, and silicates combined with lowest possible levels of impurities make MATRIX an efficient and cost effective means of fluxing the glass batch.

The lower melting eutectic of nepheline syenite permits batch engineers to lower the temperature at which liquid forms during firing, or increase the rate of pull with the confidence of a thorough and complete reaction with other components. In addition to its operating advantages, MATRIX will stabilize and strengthen insulating and structural fiber, and perform without additives or decolorizers in foam glass.

All MATRIX grades are processed and sized with rigid adherence to Covia QIP™ statistical and quality assurance programs. The result is consistently uniform chemistries, size distributions, and top size controls for optimal performance in the glass furnace.

PARTICAL SIZE ANALYSIS

Typical Mean Values. These Do Not Represent A Specification.

	Mesh Size	MATRIX® FG Grades	
	ASTM	131	134
Typical mean % retained on individual sieves	30	—	0.1
	40	0.7	4.2
	70	41.5	36.3
	100	23.1	18.7
	140	16.8	13.8
	200	10.9	12.8
	270	5.0	8.8
	325	1.1	2.7
	-325	0.9	2.9

PHYSICAL PROPERTIES

Typical Mean Values. These Do Not Represent A Specification.

MATRIX® FG Grades		
Free Silica Content	<0.1%	X-Ray Diffraction
pH Value	10.1	AFS 113-87-5
Melting Point (°F/°C)	1868/1020	ASTM C-24
Bulk Density, loose (lb/ft³)	83-87	ASTM C-29
Specific Gravity (g/cm³)	2.61	ASTM C-128

CHEMICAL ANALYSIS

Typical Mean Values. These Do Not Represent A Specification.

	Typical Mean Percent by Weight	
	131	134
Silicon Dioxide (SiO ₂)*	59.90	59.50
Aluminum Oxide (Al ₂ O ₃)	23.60	23.70
Iron Oxide (Fe ₂ O ₃)	0.09	0.24
Magnesium Oxide (MgO)	0.02	0.04
Sodium Oxide (Na ₂ O)	10.36	10.36
Aluminum Oxide (Al ₂ O ₃)	5.07	5.11
Loss on Ignition (LOI)	0.51	0.53

*Exists in a complex of albite, microcline and nepheline.

SHIPPING/ORDERING INFORMATION

- Shipping Point: Nephton, Ontario
- Originating Carrier: Canadian Pacific (CP Rail)
- Availability: Bulk, IBC, 50 lb Paper Bag
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. Avoid creating dust when handling, using or storing. Follow OSHA Safety and Health Standards for fugitive dust. Current safety data sheet, containing safety information, is available and should be consulted before usage.

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Nepheline Syenite Containing

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