

3M™ Industrial Grade Nepheline Syenite 200 Dry

3M Industrial Grade Nepheline Syenite 200 Dry is a naturally occurring nepheline syenite material.

1. Typical mineralogy

Igneous intrusive (plutonic) rock primarily consisting of potassium feldspar and plagioclase feldspar, and secondarily containing nepheline, pyroxene, biotite, amphibole, magnetite, ilmenite, sodalite, analcime, and natrolite.

2. Typical* chemical analysis reported as % oxide (X-Ray Fluorescence)

Chemical Component	2021 Average	Typical Range*	
		Lower	Upper
Silicon Dioxide (SiO ₂)	59.3	57.9	60.5
Aluminum Oxide (Al ₂ O ₃)	19.1	17.6	20.5
Potassium Oxide (K ₂ O)	6.1	5.4	6.7
Sodium Oxide (Na ₂ O)	7.9	5.7	10.4
Iron Oxide (Fe ₂ O ₃)	2.9	2.1	4.0
Calcium Oxide (CaO)	1.6	1.1	2.0
Titanium Dioxide (TiO ₂)	0.96	0.3	1.6
Magnesium Oxide (MgO)	1.0	0.0	1.8

*This product is a naturally occurring mineral that is processed and is stored outside; the moisture level, chemical composition and size will vary. Annual average is compiled from monthly data.

3. Size analysis (Microtrac S3500 Laser Diffraction)

% passing	µm	mesh
95	188	80
69	74	200
50	47	320
10	10	1500

4. Specific Gravity (Gas Pycnometer)

2.628

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