



PRODUCT DATA SHEET

High Calcium Quicklime (calcium oxide)

(CAS # 1305-78-8)

Product size: -1/8 inch

ASTM Designation: C 977 – 03
Standard Specification for Quicklime for Soil Stabilization

Chemical Composition*	Results	ASTM C 977-03
Calcium & Magnesium Oxides (Non-volatile basis)	92.54	90.0% minimum
Carbon Dioxide (CO₂) (Taken at point of manufacture)	3.14	5.0% maximum
Free Moisture (Taken at point of manufacture)	1.7%	2.0% maximum

Physical Properties*

Particle Size	100%	100% passing 1.0"
Reactivity (Temperature rise in 20 minutes)	40°C	30°C minimum
Residue	7%	10.0% maximum
Bulk Density	55- 65 lbs/ft³	

**The above test results are based on averages of representative samples taken from monthly composites of daily shipments, as reported by a certified laboratory. Normal variations in daily shipments are normal and can be expected. Due to the hygroscopic nature of quicklime, it has a high affinity for moisture and carbon dioxide. Samples from the bulk truckloads must be immediately stored in airtight, moisture-proof containers to avoid air-slaking. Caution should be taken to protect the quicklime during sampling, storage, and testing (see Practice ASTM C 50). Test methods include ASTM C 25 (gravimetric) & C110.*