

3M™ Natural Pozzolan NP100W Supplemental Cementitious Material – ASTM C618 Class N Wausau

Product Data Sheet

The 3M Wausau Plant has been in continuous operations since 1929. Our primary product lines are color coated roofing granules and what we have recently discovered is that we have been producing an ASTM C618 / ASSTHO M 295 SCM - Natural Pozzolan as a byproduct. We are pleased to offer NP100W as a Natural Pozzolan for the Midwest Ready Mix and Concrete Modular Unit Industry.

Chemical Analysis	Historical Range %	ASTM C 618 Limits
SiO ₂	58.71 – 61.28	
Al ₂ O ₃	18.46 – 19.46	
Fe ₂ O ₃	5.00 – 6.64	
• Sum SiO ₂ + AlO ₃ + Fe ₂ O ₃	84.50 – 86.50	70.0 min
CaO	2.25 – 4.00	
MgO	1.95 – 2.60	
Na ₂ O	2.55 – 3.88	
K ₂ O	3.24 – 4.63	
SO ₃	0.10 – 0.35	4.0 max
Moisture Content	0.05 – 0.20	3.0 max
Loss on ignition ¹	3.35 – 4.58	10.0 max
Total Alkalis as (Na ₂ O) Equivalent, % ²	5.55 – 6.34	

Physical Analysis	Typical Results %	ASTM C 618
Amount retained on No. 325 sieve, %	3 - 7	34 max
Blaine Fineness, cm ² /g	8000 - 9400	
Strength activity, % of control		
• Portland cement @ 7 days	81 - 84	75 min
• Portland cement @ 28 days	82 - 87	75 min
Waiver requirement, % of control	97 - 99	115 max
Autoclave expansion, %	-.01 - .02	0.8 max
Density uniformity, % from average		5 max

3M™ Natural Pozzolan NP100W

Supplemental Cementitious Material – ASTM C618 Class N

Wausau

Product Description

- Product meets and complies to ASTM C618
- Product meets and complies to AASHTO M 295
- Available in pneumatic trucks and railcars
- Tested weekly for fineness
- Tested monthly by a CCRL certified laboratory

Note 1: Loss on ignition in a Class N pozzolan is typically associated with bound water in the material that is volatilized in the loss of ignition test. Class N material, with a LOI content meeting the specification limit in Table 1, will typically not impact air entrainment when used in concrete.

Note 2: Most of the alkalis are bound and not available. Typical values for available alkalis range from 0.25% – 1.0%.

Availability: 3M Industrial Mineral Products Division
144 Rosecrans Street
Wausau, Wisconsin 715-845-0221

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