

## NYAD® Wollastonite – A Functional Additive in Powder Coatings

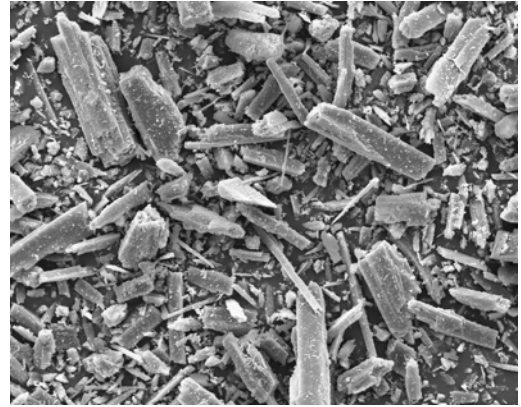
- **Corrosion Resistance**
  - The acicular structure of wollastonite improves the cohesive strength which provides improved corrosion and blister resistance.
- **Reinforcement**
  - Wollastonite acts as a reinforcing additive and promotes the retention of impact strength after prolonged exposure.
- **Moisture Resistance**
  - Pipes coated with powder are widely used in the transmission and distribution of gas. The pipes are buried in the ground and must retain adhesion, good electrical resistance and prevent corrosion over many years.
- **Gloss Control**
  - Wollastonite, especially the coarser grades, is an effective matting agent and lowers the gloss in decorative coating powders compared with other commonly used fillers.
- **Thermally Stable, High Heat Resistance**
- **Commercial Success in Varying Film Thickness and Functionality**

### Comparison Properties of Wollastonite in an Exterior Polyester/TGIC Coating Pigment: Filler Ratio is 1:3

Properties		NYAD 325	NYAD 400	NYAD 1250
<b>Wollastonite</b>				
Particle Size (D <sub>50</sub> )	µm	14	8	4
Gloss 60°	%	54	51	71
Corrosion Resistance	Salt Fog Hours	1000-1500	1000-1500	1725-2200
Impact Resistance	In-lbs., pass	160	160	160
<b>Pencil Hardness</b>				
Mar		H	H	F
Gouge		2H	H	H



Typical Properties of Wollastonite	Value
Appearance	White
Morphology	Acicular
Molecular Weight	116
Specific Gravity	2.9
Refractive Index	1.63
pH (10% slurry)	9.9
Water Solubility (g/100cc)	0.0095
Density (lbs./cu.ft.)	181
Bulking Value (gal.lbs.)	0.0413
Mohs Hardness	4.5
Coefficient of Expansion (mm/mm/°C)	6.5 x 10 <sup>-6</sup>
Melting Point (°C)	1540



**Powder Grade Wollastonite (x500)**

Product(s)	Recommendations	Features of Wollastonite
<b>NYAD® 325/M325</b> <b>NYAD® 400/M400</b> <b>NYAD® 1250/M1250</b>	<b>Functional (325, 400 Mesh)</b> <b>Decorative (325,400 or 1250 Mesh)</b>	<ul style="list-style-type: none"> <li>• Acicular (needle-like) structure improves mechanical properties and particle shape influences gloss</li> <li>• Low specific gravity</li> <li>• Nonhazardous and environmentally safe</li> <li>• Low solubility</li> </ul>
<b>NYGLOS® 8/ASPECT® 4000</b> <b>NYGLOS® 4W/ASPECT® 3000</b>	<b>High heat resistant, thicker coatings</b>	
<b>Grades used depend on coating thickness and functionality</b>	<b>Chemical modifications enhance corrosion performance</b>	

This data contains general information and describes typical properties only. It is offered for use by persons qualified to determine for themselves the suitability of our products for particular purposes. No guarantee is made or liability assumed, the application of this data and the products described herein being at the sole risk of the user.

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