

NYAD® 1250 Wollastonite – A Cost Performance Additive and TiO₂ Enhancer for Coatings

- Cost Savings - 10-20% replacement of TiO₂
- Maintains tint strength and opacity
- Improved scrub resistance
- Effective for matte finishes, controls gloss
- Advanced corrosion and blister resistance
- pH buffer
- Environmentally safe

Opacity and Color Value Comparison - 10% Replacement of TiO₂ with NYAD 1250

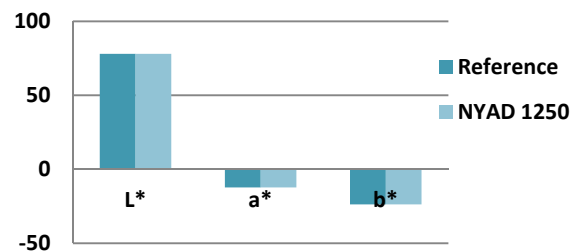
	Opacity (%)	Over Black Substrate			Over White Substrate			ΔE
		L*	a*	b*	L*	a*	b*	
Reference								
100 μm Wet Film Thickness	96.59	95.04	-0.79	0.93	96.32	-0.59	1.97	1.66
150 μm Wet Film Thickness	98.75	96.41	-0.75	2.08	96.88	-0.59	2.52	0.66
NYAD 1250								
100 μm Wet Film Thickness	96.30	95.01	-0.81	1.00	96.36	-0.63	2.07	1.73
150 μm Wet Film Thickness	98.52	96.42	-0.74	1.95	96.94	-0.59	2.45	0.75

Starting Point Formulation Contains 14% TiO₂

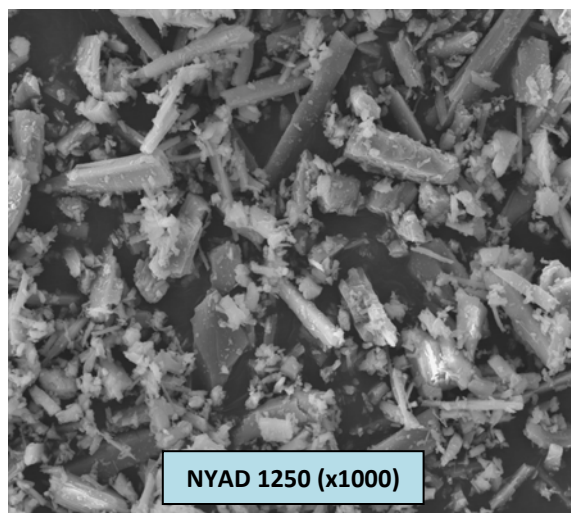
Gloss Values - 10% Replacement of TiO₂ with NYAD 1250

Reference	Gloss 20°	Gloss 60°	Gloss 85°
100 μm Wet Film Thickness	1.2	2.3	5.8
150 μm Wet Film Thickness	1.3	2.4	6.7
NYAD 1250			
100 μm Wet Film Thickness	1.3	2.5	7.8
150 μm Wet Film Thickness	1.3	2.5	7.6

Tinting Strength - 2% Blue Tinting Paste at 150 μm Wet Film Thickness



Typical Properties of Wollastonite	Value
Appearance	White
Morphology	Acicular
Refractive Index	1.63
Molecular Weight	116
Specific Gravity	2.9
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)	6.5×10^{-6}
Melting Point (°C)	1540



NYAD 1250	Typical Values	Features of Wollastonite
G. E. Brightness	93	<ul style="list-style-type: none"> • Acicular (needle-like) structure improves mechanical properties and particle shape influences gloss • High Refractive Index • Low specific gravity • Nonhazardous • Low solubility • Thermally stable
Bulk Density		
Loose	(30) (0.48)	
Tapped	(50) (0.80)	
Oil Absorption	27	
Hegman Grind	>6	
Microtrac D ₅₀	4	
Aspect Ratio	3 :1	

*Viscosity will drop with the replacement of TiO₂ with wollastonite. The replacement levels of TiO₂ are formulation dependent and customers are advised to test in their own formulation to determine optimal levels of replacement.

*NYCO offers a range of wollastonite products for testing. Results will vary due to particle size and application.

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.

For any further information, please contact info@nycominerals.com

