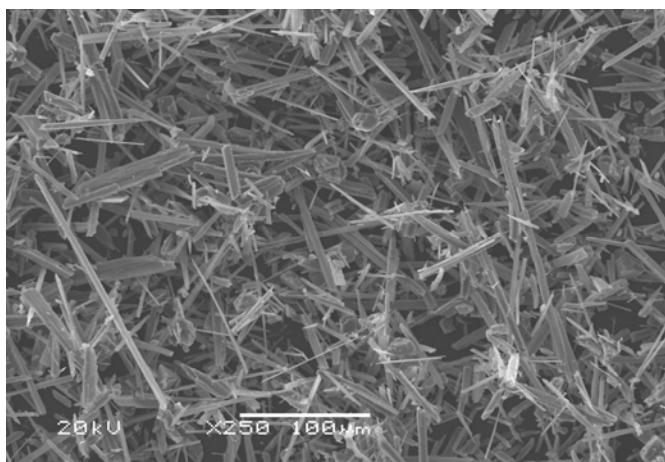




## Wollastonite, A Natural Functional Filler for Elastomers

NYCO's tailored inorganic wollastonite is one of the brightest and most cost effective minerals formulated in filled and reinforced rubber compounds for a broad range of end use markets. NYCO's wollastonite grades are commercially used in many elastomers including gaskets, belts, plugs, o-rings, seals, mats and other applications for molded, extruded and fabricated parts. To increase reinforcement by application requirements, NYCO has a portfolio of products from low to high aspect ratio materials ranging in surface area, brightness and particle size distribution. This range of products and selected surface area provides the amount of reinforcement required, limited by the viscosity of the compound. All NYCO grades have excellent dispersibility which is critical for highly filled systems and low shear mixes.

NYCO's high aspect ratio reinforcing grades (NYGLOS®/ASPECT™) provide the highest reinforcing properties due to the tightly controlled fiber length to diameter. Our family of low aspect ratio extender grades (NYAD®) lowers the cost and fills up the volume in a rubber matrix and typically provides improved reinforcing characteristics to competitive fillers and extenders. The selected NYCO product has its own unique benefits.



### General Benefits

- Lower viscosity
- Improved flex/fatigue
- Increased tear and abrasion resistance
- Excellent tensile strength
- Reduction in heat build-up
- Reduced rolling resistance
- Longer product life
- No moisture uptake—Resistance to moisture
- Excellent flame retardant properties
- Stable at high processing temperatures

Typical Loading Levels	Products	Examples of Elastomers
10 to 15 % Loading by Weight	Powder Grades ( NYAD 400, NYAD M400, NYAD 1250, NYAD M1250 )	<b>Unsaturated Rubbers (generally sulfur cured)</b> Natural rubber (NR), Styrene-butadiene rubber (SBR), Nitrile rubber, Neoprene
10 to 15 % Loading by Weight	High Aspect Ratio ( NYGLOS 8, NYGLOS 4W, ASPECT 3000, ASPECT 4000 )  All products are available surface modified with reactive silanes or tailored wetting agents to enhance processing and improved mechanical properties.	<b>Saturated Rubbers (not sulfur cured)</b> Ethylene propylene diene rubber (EPDM), Silicone rubber, Fluoroelastomers, Ethylene-vinyl acetate (EVA)  <b>Other Types of Elastomers</b> Thermoplastic elastomers, (TPE) Thermoplastic vulcanizates, (TPV), Thermoplastic Olefins (TPO), Polysulfide Rubber

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 users.