



High Performance Functional Products

Paints and Coatings

Engineered Products for Productive Coatings

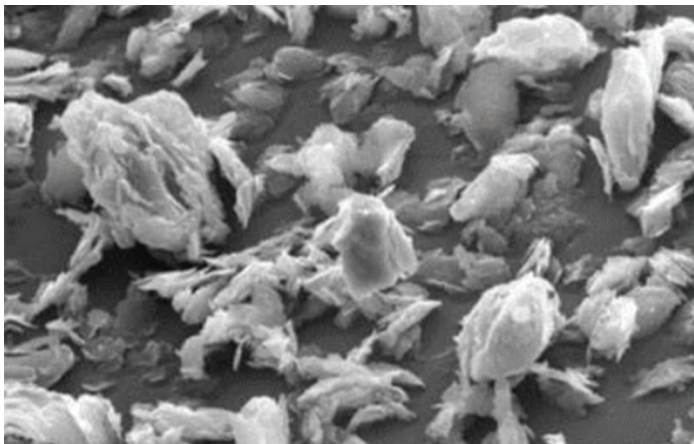


Magris Talc engineered microcrystalline talc products are high-purity, premium mineral pigments ideal for high performance coatings. They are designed to give minimum viscosity build and allow for higher loading levels in VOC compliant and high-solids industrial and architectural coatings.

Engineered talc products impart hydrophobicity, water resistance, and barrier properties, anti-corrosion performance, film reinforcement, ease-of-dispersion, and anti-settling rheology for industrial maintenance coatings, marine coatings, and general industrial and protective coatings.

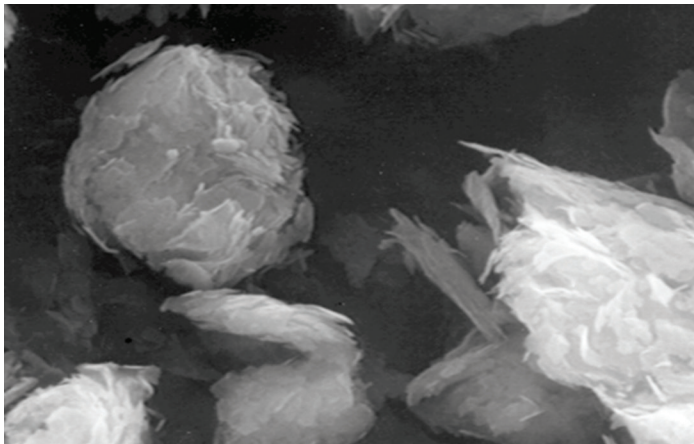
Engineered Talc Products

Via Conventional Processing



SEM's @ 2000X

Via Engineered Process



Magris Talc Engineered Product Line

Product	Top Size, Hegman	Particle Size Median Micron	Oil Absorption
Mistron® 201	2.0	28	18
Silverline® 202	2.0	20	20
Nicron® 302	3.0	13	22
Nicron® 402	4.0	10.5	25
Nicron® 503	5.0	6.0	33
Mistron® RCS	5.5	3.9	37
Nicron® 674	6.5	1.9	41

Low Viscosity Build

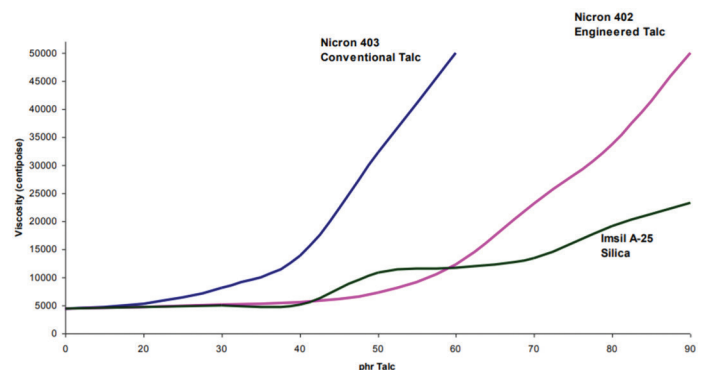
Microcrystalline talc products are oleophilic and have the ability to associate with typical industrial coating resins such as alkyds, epoxies, polyesters, acrylics, amines, and polyols. In doing so, they create weak bonds with these resins that result in increased low-shear viscosity. When shear is applied the bonds break quickly, resulting in shear-thinning coating rheology that is ideal for many applications.

The Engineered Series of microcrystalline talc products have a unique particle size distribution that maintain a high performance level in industrial coatings while giving minimal viscosity build and maintaining anti-settling properties. These products also allow higher loading levels that result in potential cost-saving opportunities.

Superior Anti-Corrosion Performance

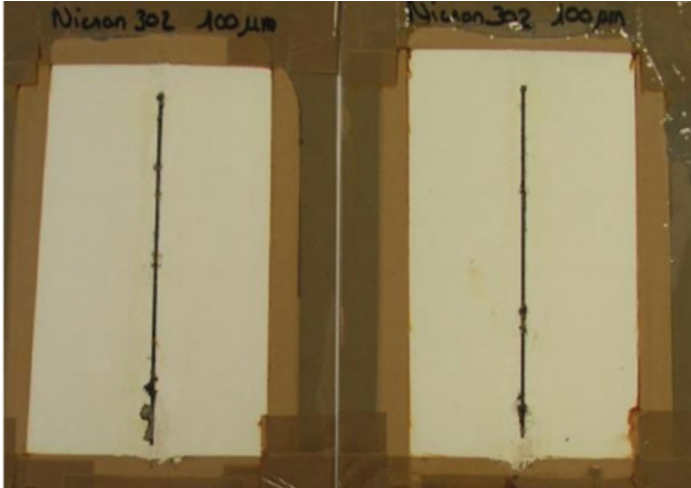
Magris microcrystalline talc products are proven anti-corrosion mineral pigments for demanding applications such as marine coatings, heavy industrial maintenance coatings, general industrial and direct-to-metal paints.

Engineered Talc has Greatly Reduced Viscosity Build for Low Voc Coatings

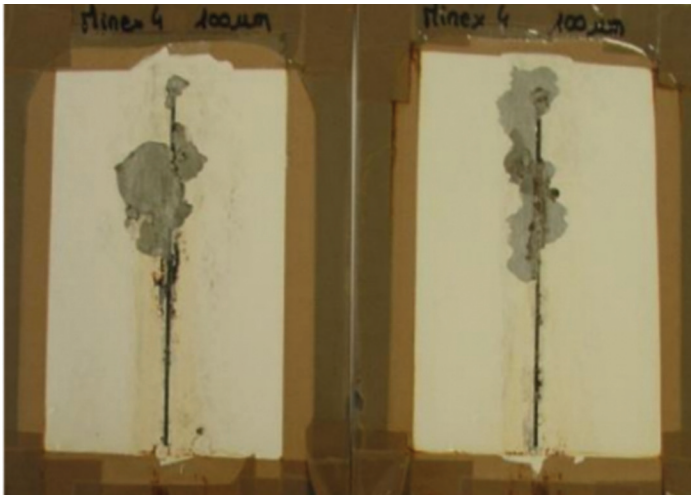


Brookfield Viscosity Chart Spindle Number @ 20 rpms 100% Solids Epoxy/DBP System

Engineered Talc has Outstanding Corrosion Resistance



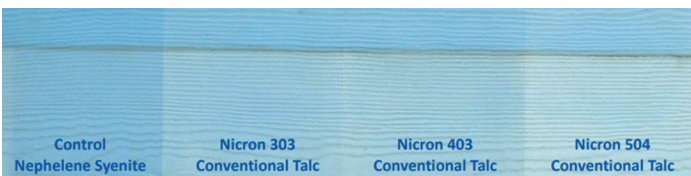
NICRON 302



4- HEGMAN NEPHELENE SYENITE

Corrosion Resistance (Salt Spray), 2K High-Solids Epoxy 31% Extender Loading (11% Barytes, 15% TiO₂) <175g/L VOC

Engineered Talc has Greatly Improved Exterior Durability



55% PVC ARCHITECTURAL EXTERIOR LATEX PAINT

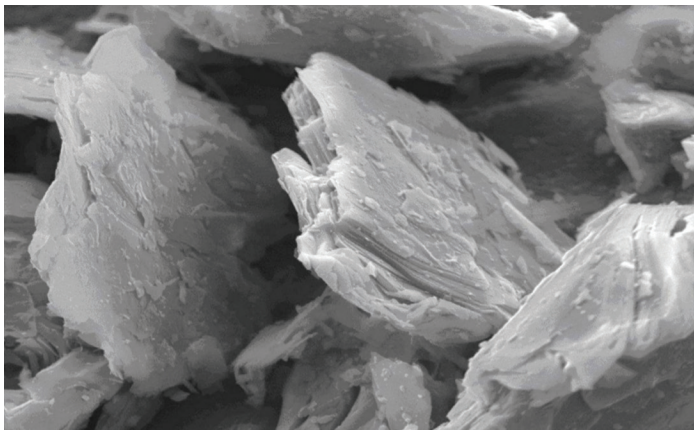
Ease-of-Dispersion and Lower Dust in Processing

The Engineered products are also less prone to dust generation compared to conventional talc products due to their unique particle size distribution.



Product	Top Size, Hegman	Particle Size Median Micron	Binder Demand Oil Absorption	Powder Brightness
Vertal® 92	2.0	18.0	22	72
Vertal® 97	2.0	15.0	25	72
Vertal® 7	4.0	9.0	27	73
Vertal® 202	2.0	15.0	24	80
Vertal® 77	4.0	9.0	27	80
Vertal® 503	5.0	7.0	29	80

Vertal® products are highly lamellar (platy), multi-functional, cost-effective mineral pigments that improve the performance and reduce the formulated costs of interior, exterior, waterborne and primers.



VERTAL 77 TALC | SEM 2000X MAGNIFICATION

Using Vertal® products offers coating formulators the following performance advantages:

Opacity and Stain Hiding

Vertal® mineral pigments improve titanium dioxide distribution in the bulk paint film and across the %PVC spectrum. This keeps formulated costs at a minimum while optimizing the effectiveness of expensive prime pigmentation.

Barrier Properties and Stain-Blocking

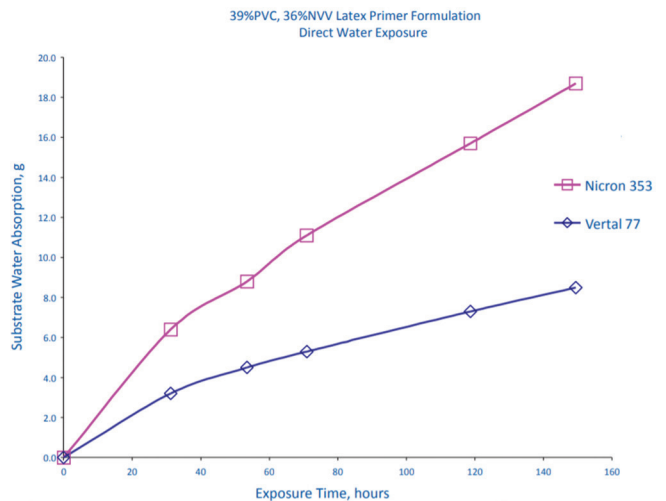
The unique, lamellar morphology of Vertal® talc products provide improved barrier properties for interior and exterior waterborne primer/ sealer applications. They increase coating hydrophobicity, reduce permeability, and reduce bleed-through of stains and salts that can cause further discoloration failures of topcoats and enamels.

Film Reinforcement

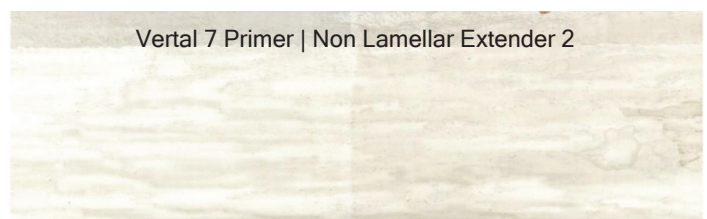
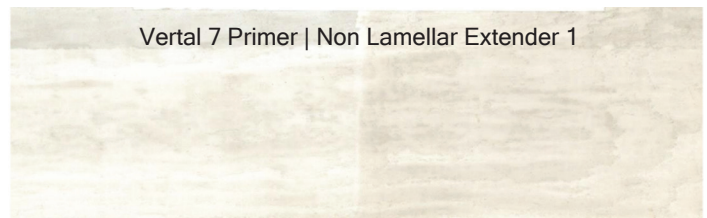
Vertal® platy talc product provide improved film reinforcement and dimensional stability to coatings for additional protection against grain cracking and mud cracking failures.

Ease-of-Dispersion

Vertal® mineral pigments are low binder-demand talc products that disperse readily in waterborne systems with a minimum viscosity build.



Vertal platy talc product produce a lower permeability coating that improves barrier properties and stain blocking.



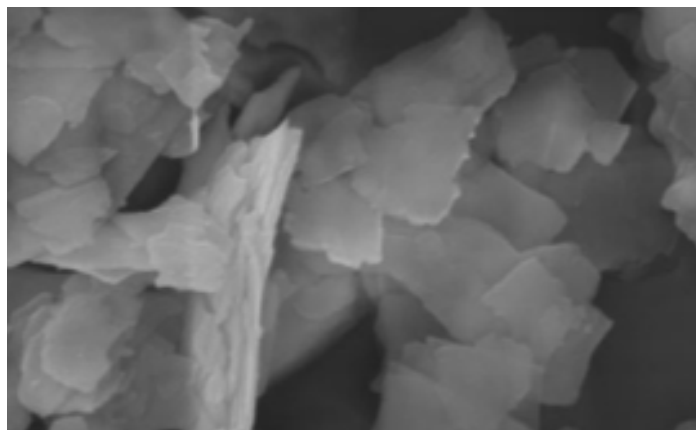
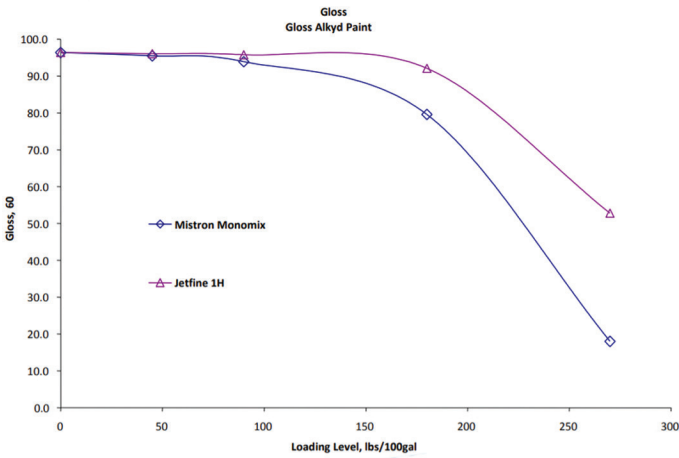
Jetfine 1H

- Jetfine 1H uses proprietary, ultrafine, micronizing technology which produces highly lamellar talc product with a high specific surface area.
- Jetfine 1H is a natural, high purity, microcrystalline talc product.
- With a top cut of 5µm and a median particle size of less than 1µm, Jetfine 1H is the smallest particle size talc product available on the coatings market.

Jetfine 1H has Much Higher Gloss Potential

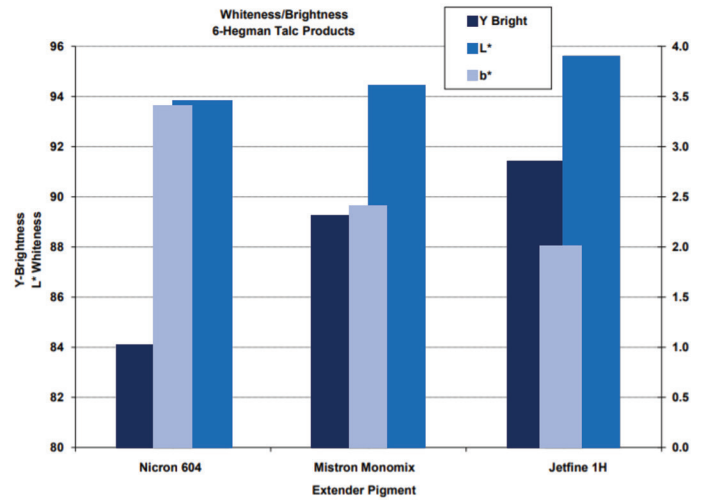
Product	Particle Size Median Micron	Top Size, Hegman	Powder Brightness
Jetfine 1H	7.5	1.1	92

Jetfine 1H – High Gloss Potential



Jetfine 1H – Higher Whiteness Coating

- Higher L* & Y
- Lower b*



Surface – Treated Products

Mistron® TZ - 2 and Mistron® CB

Proprietary, surface-treated talc products recommended for specific high performance coatings applications, while maintaining ease of dispersion, high brightness, and excellent rheology.

Surface -Treated Microcrystalline Talc:

- Improved Pigment/Binder Bonding
- Improved Blush Resistance
- Maintains:
 - Polishing
 - High Whiteness/Brightness
 - Polishing Properties

Product Line

Product	Particle Size Median Micron	Top Size, Hegman	Powder Brightness
Mistron® TZ - 2	2.0	6.0	87
Mistron® CB	2.0	6.0	87



Product Overview



Mistron® Product Series

Mistron® products are high-brightness, high-purity talc products that offer superior pigment spacing properties and flattening efficiency for architectural and industrial coatings.

Product	Particle Size Median Micron	Top Size, Hegman	Powder Brightness
Mistron® 002	9.0	2.0	84
Mistron® 303	7.5	3.0	84
Mistron® 353	6.6	3.5	85
Mistron® 403	4.5	4.0	86
Mistron® 554	3.2	5.5	87
Mistron® 604	2.4	6.0	87

Mistron® Micronized Product Series

Micronized Products are micronized talc products that serve as unique thixotropes and flattening pigments for architectural and industrial coatings.

Product	Particle Size Median Micron	Top Size, Hegman	Powder Brightness
Mistron® Vapor R	2.2	5.5	86
Mistron® Monomix	2.0	6.0	88
Mistron® Ultramix	1.8	6.5	88

Nicron® Product Series

Nicron® products are general-purpose talc with high purity and good brightness for architectural coatings and anticorrosive functionality for industrial coatings.

Product	Particle Size Median Micron	Top Size, Hegman	Powder Brightness
Nicron® 002	9.0	2.0	80
Nicron® 303	6.9	3.0	82
Nicron® 353	6.6	3.5	83
Nicron® 403	4.7	4.0	83
Nicron® 504	3.2	5.0	83
Nicron® 554	3.2	5.5	84
Nicron® 604	2.3	6.0	85
Nicron® 665	1.2	6.5	87

Silverline® Product Series

Silverline products are cost-effective general-purpose talc products for non-color sensitive architectural and industrial coatings.

Product	Particle Size Median Micron	Top Size, Hegman	Powder Brightness
Silverline® 002	9.0	2.0	75
Silverline® 303	6.1	3.0	78
Silverline® 403	4.7	4.0	81
Silverline® 504	3.2	5.0	81
Silverline® 604	2.3	6.0	80



About Magris Talc

Magris Talc is one of the world's leading talc producers, supplying around 15 percent of world demand from our mines and processing plants in Canada and the United States. We are the acknowledged leaders in product quality, supply reliability and technical support – the services that create value for our customers and set us apart from competitors.

About Talc

Talc is a surprisingly versatile, functional mineral which possesses a unique combination of properties. Talc is soft, water repellent, chemically inert and highly platy and has a marked affinity for certain organic chemicals. Our industry experts have harnessed these properties to bring customers improved performance in a wide range of applications such as paper, paints, plastics, rubber, ceramics, agriculture, food, pharmaceuticals, cosmetics and soap.

Meeting Today's Needs. Securing Tomorrow's.

We believe that running a successful business and sustaining quality of life and the environment go hand in hand. From implementing behavior-based safety training to rehabilitating the land, we think it's important that future generations' needs are not compromised by our actions today.

Our Fundamental Sustainability Principles are:

Safety – We promote the health and safety of employees, contractors, customers, neighbors and consumers through active caring.

Partnership – We seek to understand the issues that are important to our neighbors, and to make a lasting contribution to the communities in which we operate.

Environmental Protection – We work to minimize our environmental footprint by using natural resources efficiently, preventing pollution, complying with applicable laws and regulations and continually improving our performance.

Accountability – We conduct business in an accountable and transparent manner, relying on external auditing and reporting to understand and reflect our stakeholders' interests.

Magris Talc

www.magristalc.com

For more information, contact our team at sales@magristalc.com

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