



Multifunctional Filler

CelTiX™ Natural Diatomaceous Earth

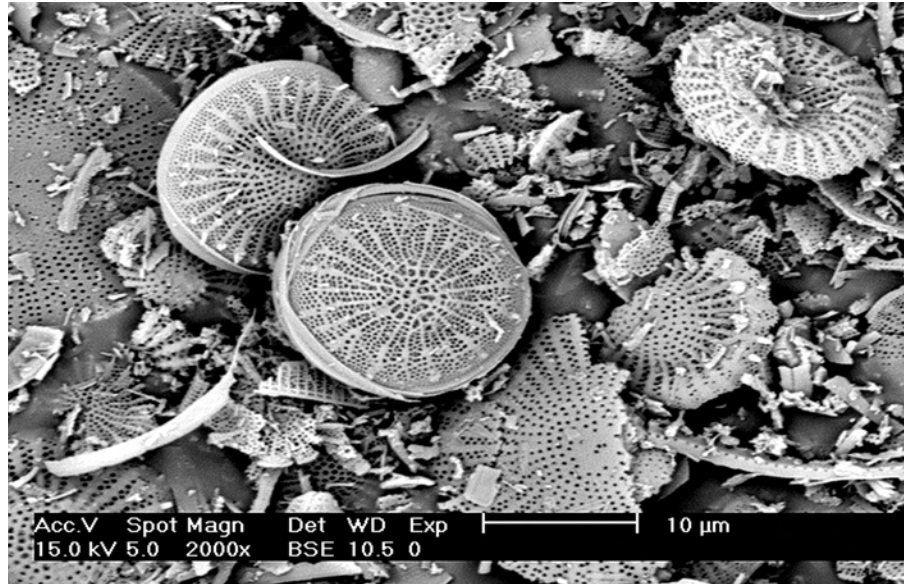
Multifunctional Properties

- Excellent hiding power
- Good matting effect
- Improved burnish resistance
- Film permeability control
- Low bulk & specific density
- Reduced thickener requirement
- Faster dry-to-touch time
- Easily dispersed in water and solvent systems
- No significant crystalline silica content (<0.2%)
- Low carbon footprint impact

High Performance Matting and Hiding

CelTiX was developed to enhance product performance, bringing many advantages to the end formulation. Due to its specific porous microstructure, CelTiX traps air in its voids, which then act like tiny deflecting mirrors, scattering light and adding opacity to the paint film. The tight particle size distribution also provides good sheen control without sacrificing burnish and scrub resistance or surface smoothness.

Chemically inert, CelTiX is compatible with typical resins and common formulating additives used in the paint and coatings industry.

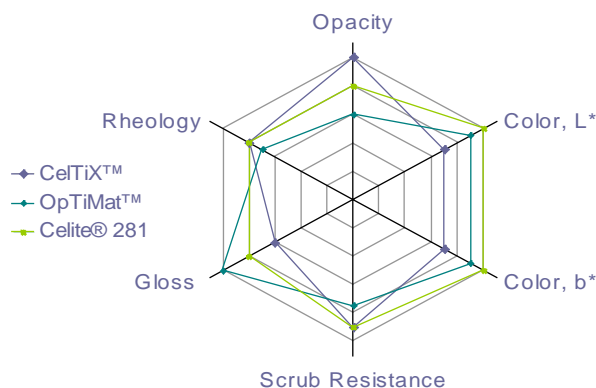


CelTiX natural diatomaceous earth

Formulating With CelTiX

CelTiX offers many advantages to your formulations over other matting and hiding agents which can help rationalize raw materials, reduce costs and enhance product performance. CelTiX offers outstanding hiding power without compromising tint strength; it can be used in interior or exterior paints and it allows

for high color intensity and whiteness. CelTiX can also be used as a cost effective, high performance replacement for titanium dioxide (up to 20% replacement of TiO₂.) Additionally, CelTiX enhances your formulation stability, dry time and rheology control.



Sample Formulation: 48 PVC Interior Flat Paint

Raw Material	Control	CelTiX
Water	15.4%	15.5%
Nuosept 95	0.1%	0.1%
KTPP	0.2%	0.2%
Drew Plus L 475	0.2%	0.2%
Natrosol Plus 330	0.3%	0.2%
Propylene Glycol	1.8%	1.8%
Water	5.3%	5.3%
Tamol 850	0.5%	0.5%
Tergitol NP-9	0.3%	0.3%
AMP 95	0.3%	0.3%
TiO ₂ - CR826	15.0%	15.1%
Extender	9.7%	0.0%
Minex 7	1.8%	4.7%
CaCO ₃ - CalWhite - 5u	7.9%	11.0%
Matting agent	3.3%	0.0%
Water	10.7%	10.7%
CelTiX	0.0%	6.7%
Ucar 379G	25.4%	25.5%
Texanol	1.3%	1.3%
Acrysol TT 935	0.5%	0.5%
Drew Plus L 475	0.2%	0.2%
Total	100.0%	100.0%

Typical Results*

The benefits of CelTiX are highlighted below in blue.

Properties	Control	CelTiX
Density	1.37	1.35
Viscosity KU @ 25 C	95	97
Paint pH	9.1	9.2
C. Ratio 75 microns / 3 Mils	95.7	96.0
C. Ratio 150 microns / 6 Mils	96.9	97.5
Reflectance	90.2	90.2
Whiteness	83.8	83.9
Yellowness	3.5	3.6
Hunter L	95.1	95.0
Hunter a	-0.2	-0.1
Hunter b	1.4	1.4
Gloss @ 60 deg	2.1	2.0
Sheen @ 85 deg	1.6	1.4
Tint Strength	47.9	49.1
Burnish Resistance	0.9/4.8	0.6/3.1

*The physical properties of the products represent typical values obtained in accordance with World Minerals test methods and are subject to manufacturing variations. They are provided here as a general reference only, are subject to change without notice, and should not be relied on for any particular application.



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