

## 3M W-410 Ceramic Microspheres

Category : Ceramic , Oxide , Aluminum Oxide

### Material Notes:

3M™ White Ceramic Microspheres are unique, semi-transparent, white-colored, fine particle size, high-strength microspheres. These products are typically used to reduce VOC levels; increase filler loadings; improve hardness; and add burnish, scrub and abrasion resistance to a variety of coating formulations. Due to the ceramic chemistry of these products, they are also UV transparent down to 250 nm and have utility in radiation-curable and thin-film powder coatings. Information provided by 3M

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_3M-W-410-Ceramic-Microspheres.php](http://www.lookpolymers.com/polymer_3M-W-410-Ceramic-Microspheres.php)

Physical Properties	Metric	English	Comments
Bulk Density	1.50 g/cc	0.0542 lb/in <sup>3</sup>	
Density	2.40 g/cc	0.0867 lb/in <sup>3</sup>	
Particle Size	1.0 µm	1.0 µm	10" Percentile
	4.0 µm	4.0 µm	50" Percentile
	15 µm	15 µm	90" Percentile
	24 µm	24 µm	95" Percentile
pH	9.0 - 12	9.0 - 12	ASTM E70
Specific Surface Area	3.0 m <sup>2</sup> /g	3.0 m <sup>2</sup> /g	

Mechanical Properties	Metric	English	Comments
Hardness, Mohs	6.0	6.0	
Compressive Strength	>= 414 MPa	>= 60000 psi	

Thermal Properties	Metric	English	Comments
Thermal Conductivity	2.30 W/m-K	16.0 BTU-in/hr-ft <sup>2</sup> -°F	
Softening Point	1020 °C	1870 °F	

Optical Properties	Metric	English	Comments
Refractive Index	1.53	1.53	Predominat, Becke Line

Electrical Properties	Metric	English	Comments
Dielectric Constant	3.19	3.19	

Descriptive Properties	Value	Comments
Color	White	
Oil Absorption	44 gm oil/100cc microspheres	
Whiteness	95	Hunter, "L" Value, ASTM D2244

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China