

Make your life easier with lightweight fillers



Omyasphere[®] 200 series

Lightweight fillers based on
closed-cell expanded perlite



THINKING OF TOMORROW

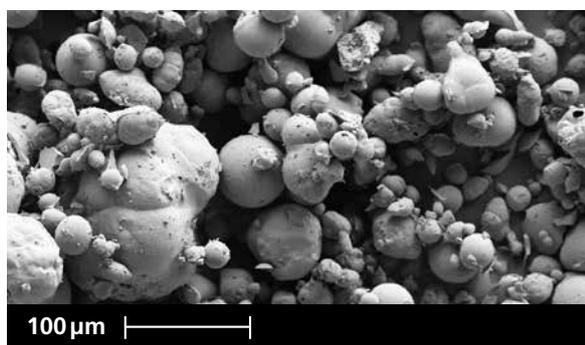


 enhanced
by Omya

Omyasphere 200 series

The family of lightweight fillers based on closed-cell expanded perlite make your life easier

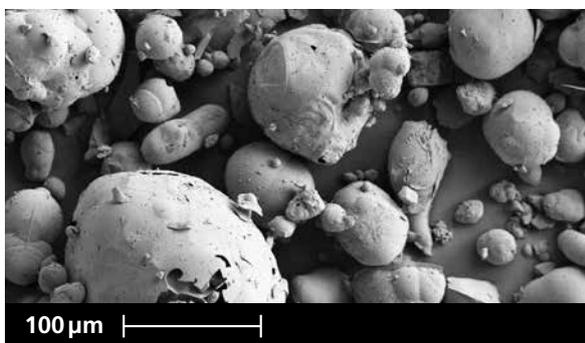
Scanning electron microscope (SEM)



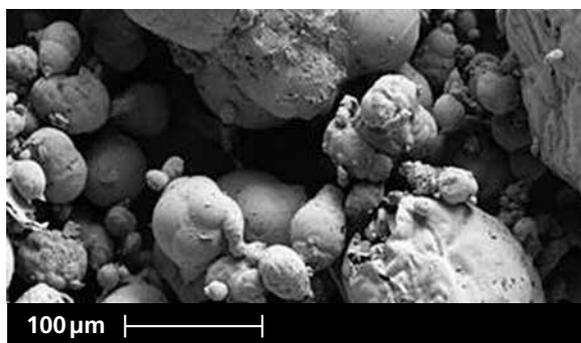
Omyasphere 220



Omyasphere 223



Omyasphere 227



Omyasphere 235

The demand for lightweight fillers is rapidly growing around the world due to increased efficiency of raw material usage and increasing demand for functional performance. Omya's solution to this societal trend is a second generation of lightweight fillers, based on closed-cell expanded perlite. The Omyasphere 200 series combines very low density with high brightness, with benefits to the environment as well as the health and safety of people.

Highlights

- *Closed-cell microspheres*
- *Low density*
- *High & consistent brightness*
- *Controlled top cut*



Products	d98% (µm)	Loose bulk density (kg/m ³) / (lbs/ft ³)	CIE L*	Hydrophobic
Omyasphere 212 T - FQ	120	130 / 8.1	90.0	Yes
Omyasphere 213 T - FQ	130	130 / 8.1	84.0	Yes
Omyasphere 220 - FQ	200	120 / 7.5	86.0	No
Omyasphere 220 T - FQ	200	120 / 7.5	86.0	Yes
Omyasphere 220 TM - FQ	200	170 / 10.6	86.0	Yes
Omyasphere 223 - FQ	230	120 / 7.5	83.5	No
Omyasphere 223 T - FQ	230	120 / 7.5	83.5	Yes
Omyasphere 227 - FQ	270	140 / 8.7	81.0	No
Omyasphere 227 T - FQ	270	140 / 8.7	81.0	Yes
Omyasphere 227 TM - FQ	270	140 / 8.7	81.0	Yes
Omyasphere 235 - FQ	350	100 / 6.2	81.0	No
Omyasphere 235 T - FQ	350	100 / 6.2	81.0	Yes
Omyasphere 235 TM - FQ	350	100 / 6.2	81.0	Yes



Overall Benefits

- *Less weight per volume unit of product applied*
- *Outstanding workability*
- *Excellent sanding properties*
- *Improved storage stability with hydrophobic products*
- *Lower environmental emissions in the transportation of finished goods*

Applications (in inorganic & organic binder systems)

- *Joint compounds*
- *Joint fillers*
- *Spackles*
- *Spackling compounds*
- *Elastomeric roof coatings*
- *Ceramic tile adhesives*
- *Plasters & renders*
- *Panels & boards*
- *Waterproofing asphalt membranes*



Benefits by Application

Joint Fillers & Spackles

Omyasphere 200 series provide significant savings on transportation costs whilst supporting a worker's health and safety by reducing the weight of final products by up to 40%. In addition, final product properties will improve.



- *Weight reduction for same spread rate or higher yield*
- *Improved workability and sag resistance*
- *Better sandability*
- *Less cracking leading thicker coats*
- *Improved long term stability*

Polymeric Joint Filler	Parts by Weight (%)
Water	39
Biocide	0.1
Ground Calcium Carbonate	50
Dispersant	0.1
EVA Latex Emulsion	2.7
Omyasphere 220 T	7
Clay / Rheology Agent	0.8
Thickener	0.3
Total	100

Spackle	Parts by Weight (%)
Water	30
Dispersant Agent	0.1
Mineral Rheological Additive	0.5
Cellulose Ether	0.5
Defoamer	0.5
Dispersant Agent for minerals	1.1
Sodium Hydroxide	0.5
Biocide	0.2
Styrene Acrylic Copolymer	7.5
Thickener	1.1
Ground Calcium Carbonate	28
Ground Calcium Carbonate	22
Omyasphere 220 T	6
Water (on demand)	2
Total	100

Renders & Plasters

The use of Omyasphere 200 series allows higher spreading rates per batch of material, resulting in improved properties and cost savings.



- *Higher yield and higher layer thicknesses*
- *Enhanced workability*
- *Improved sag resistance*
- *Thicker coat with less cracking*

Render ready to use	Parts by Weight (%)
Liquid base (binder, thickener, defoamer, water etc.)	38
Sand 0.1/0.6	16
Ground Calcium Carbonate	38
Additives (organic thickeners, rheological additives, etc.)	2
Omyasphere 227 T	4
Water	2
Total	100

Ceramic Tile Adhesives

Even at low dosage rates, Omyasphere 200 series can provide significant density reductions, improved properties and faster application rates, in addition to transportation cost savings.



- *Weight reduction at same spread rate*
- *Faster tiling operations*
- *Improved workability*
- *Enhanced sag resistance*

High yield - thin Bed Tile Adhesives	Parts by Weight (%)
Portland Cement	50
Redispersable Powder	5
Ground Calcium Carbonate	10
Silica Sand 0.1/ 0.5	30
Omyasphere 235 T	3
Additives (thickener, set control, rheology modifier, etc.)	2
Total	100
Water for Application	39

Elastomeric Roof Coatings

Omyasphere 200 series provide potential savings on transportation cost by replacing conventional fillers such as silica sand whilst simultaneously improving coating properties.



- *Higher yield - Increased coating thickness*
- *Easier application and processing*
- *Improved thermal emittance*

Acrilyc Elastomeric Roof Coating	Parts by Weight (%)
Water	14.2
Dispersant	0.4
Deflocculant	0.1
Defoamer	0.2
Ground Calcium Carbonate	24.1
TiO ₂	6.6
Mildew-stat	4.4
Omyasphere 220 T	2.0
Estiren Acrylic Emulsion	44.1
Defoamer	0.2
Coalescent	0.7
Biocide	0.2
pH control	0.1
Extender	2.3
Thickener	0.4
Total	100

*Innovation – Omyasphere 200 series
make your life easier*





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OMYA PIGMENTS**

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