

Construction

Omyasphere Portfolio

Omya's lightweighting and
insulation solutions for effortless,
efficient, and more sustainable
applications



THINKING OF TOMORROW



Omyasphere® Product Portfolio



Many applications, one portfolio: Omyasphere series

Omyasphere is a complete solution portfolio based on closed-cell expanded perlite and hollow glass microspheres to support your applications.

You can choose from:

- **Omyasphere 200**
closed-cell expanded perlite;
- **Omyasphere 400**
higher resistance closed-cell expanded perlite;
- **Omyasphere 900**
hollow glass microspheres.

Omyasphere is ideal to support **carbon footprint reduction**. Omyasphere also helps reduce thermal conductivity and related energy consumption, for improved well-being and resource consumption reduction. Lower weight also means CO₂ emissions reduction during transportation of the end products.

Omyasphere facilitates the recycling of building materials.

The power of light materials

Microspheres have become more widely adopted and popular in the construction sector, driven by a fast, increasing demand for more sustainable and more efficient lightweight products.

Such engineered minerals not only help reduce weight, but they can also make application easier, lower transportation costs and footprint and improve insulation.

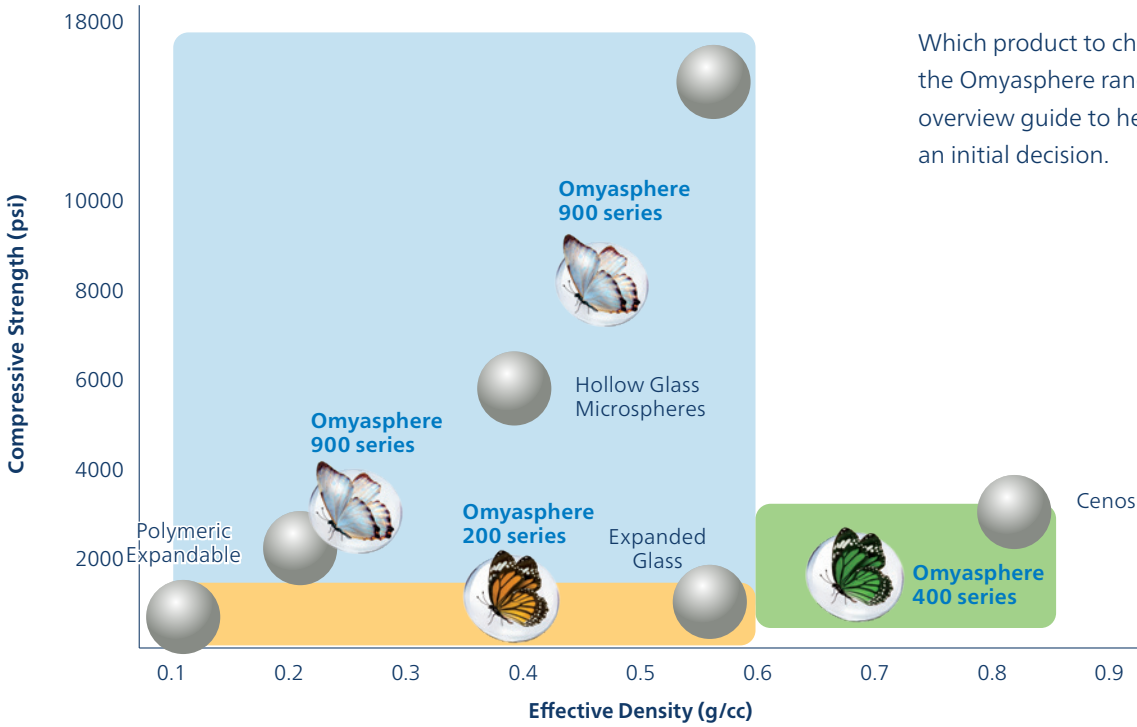
Why choosing LWF

- ✓ Weight reduction
- ✓ Higher yield
- ✓ Dimensional stability
- ✓ Thermal insulation
- ✓ Workability and sandability
- ✓ Total system cost savings

Omyasphere: which product is right for me?

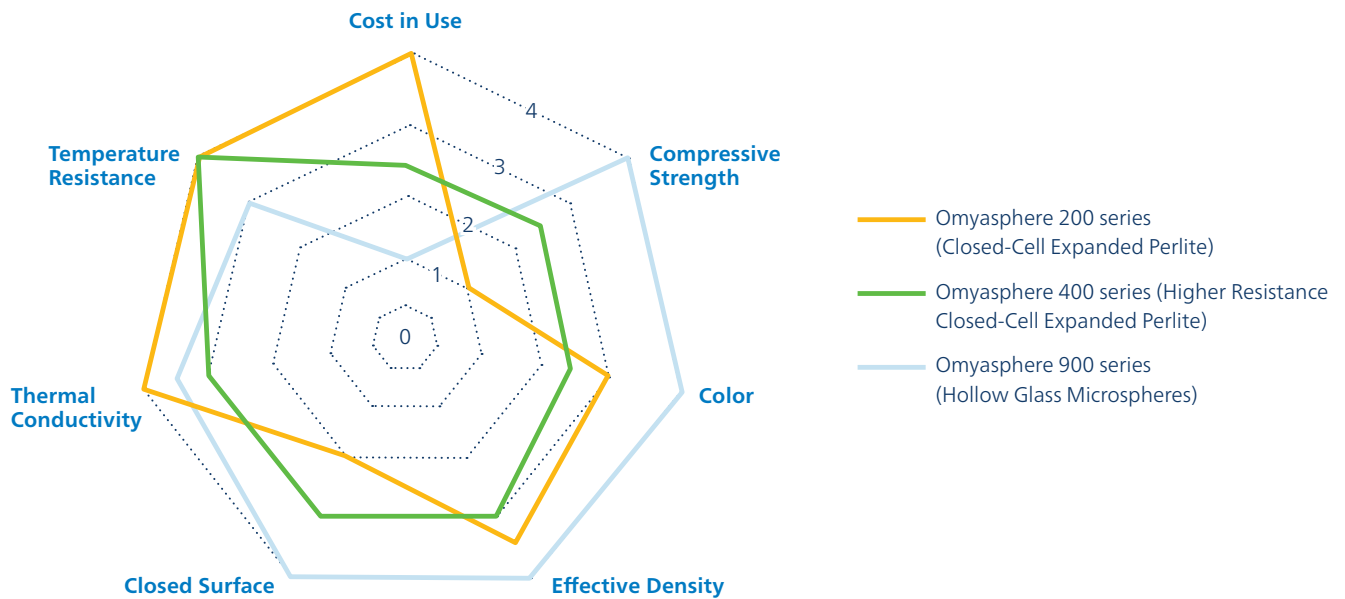


Omyasphere portfolio: market position



Which product to choose from the Omyasphere range? Here is an overview guide to help you make an initial decision.

Positioning Omyasphere series



The different characteristics and performance attributes of the different Omyasphere solutions.

For each application, an Omyasphere solution

Omyasphere engineered minerals have been specifically developed to boost the products used by professionals in the building sector from all over the world. Choose your Omyasphere grade according to your product and start boosting your performance today!

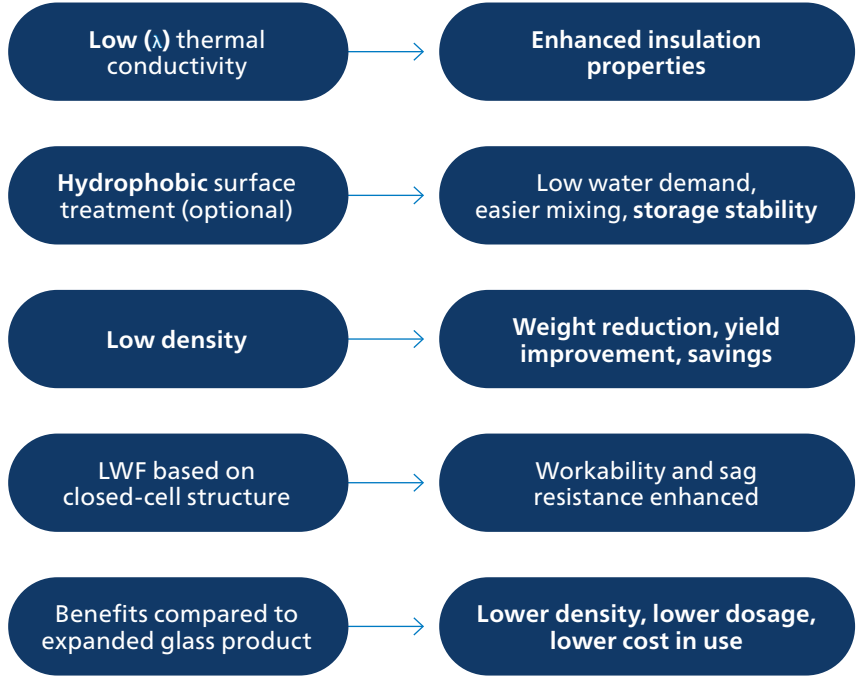
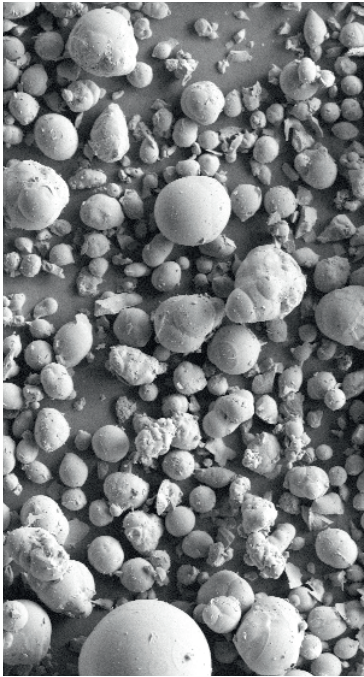
Main applications	Omyasphere 200 series	Omyasphere 400 series	Omyasphere 900 series
Building Refurbishment & Finishing			
Spackles / Joint Compounds / Joint Fillers / Putties	●●		○
Acrylic Plasters	●●	○	○
Gypsum Joint Filler / Mortars / Renders / ETICS	●●	●●	
Ceramic Tile Adhesives	●●	○	
Self Levelling Underlayment / Tile Grouts		●●	
Panels & Boards	○	●●	
Concrete			
LW Concrete / Infra LW Concrete / 3D printing	○	●●	
Paints & Coatings			
Comfort Paints	○		●●
Deco Paints			●●
Roofing & Flooring			
Elastomeric Roof Coating / Cool Roof	●●		●●
Waterproofing Asphalt Membranes / Sealers	●●	●●	
Adhesives & Sealants			
PU / SMP / Silicone		○	●●
Acrylic / Epoxy	○	○	●●

●● First choice ○ Second choice



Omyasphere 200

Closed-cell expanded perlite



LWF = Lightweight Filler

Omyasphere 200: grade selection

Based on closed-cell expanded perlite, the Omyasphere 200 solution set is suggested for hand, roller, or brush applications and can even be used in low-pressure spraying operations (e.g. tile adhesives, joint compounds, renders, plasters, self-leveling, roof coatings, insulating paints). The Omyasphere 200 range offers a large portfolio of grades with a top cut ranging from 120 to 500 microns, and grades coated for improving hydrophobicity and enhancing stability over time in ready-to-use systems.

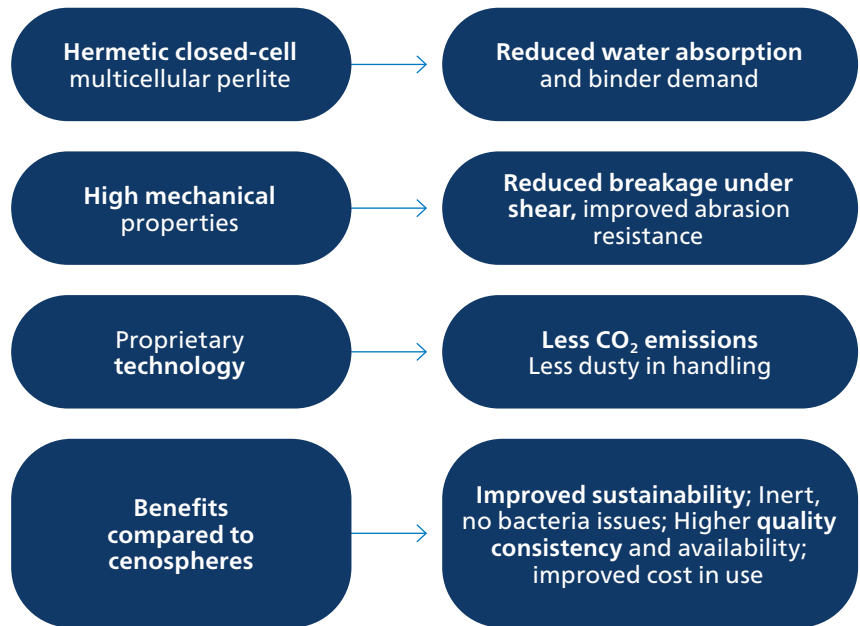
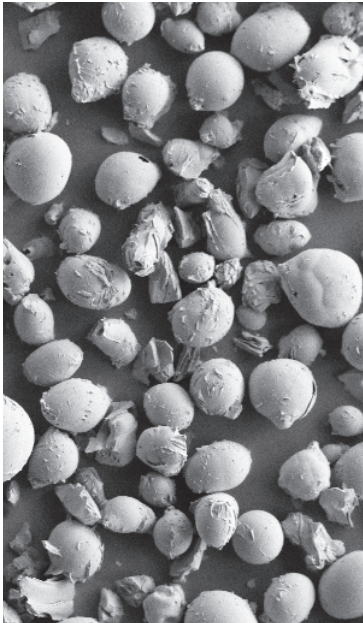
Properties	D50 (μm)	D98 (μm)	Coating	Bulk Density (kg/m^3)	Effective Density (g/cc)	Brightness L^*
Omyasphere 212 T - FQ	40	120	High level	130	0.30	90
Omyasphere 220 - FQ	80	200	No	120	0.41	86
Omyasphere 220 T - FQ	80	200	High level	120	0.27	86
Omyasphere 220 TM - FQ	80	200	Mid level	170	0.30	86
Omyasphere 235 - FQ	130	350	No	100	0.38	81
Omyasphere 235 T - FQ	130	350	High level	100	0.23	81
Omyasphere 235 TM - FQ	130	350	Mid level	100	0.23	81

Omyasphere 400

The closed-cell expanded perlite with excellent resistance and minimum CO₂ emissions



Its outstandingly low CO₂ footprint allows significantly lower CO₂ footprint in your applications when compared to formulations using competitive lightweight fillers.



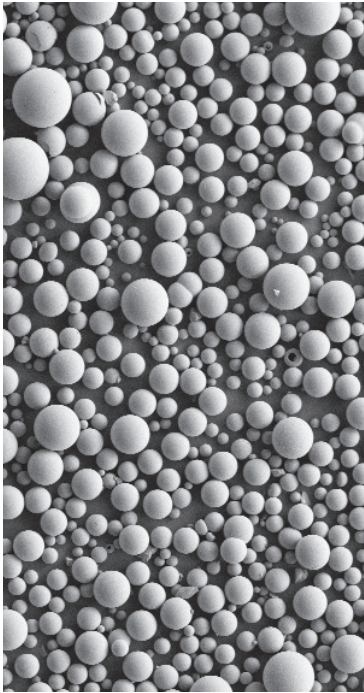
Omyasphere 400: select your ideal grade

Omyasphere 400 is based on controlled thermal expansion of the natural raw material perlite. All products belonging to the Omyasphere 400 family are manufactured using a patented, energy-efficient process to meet specific requirements of the building industry. Omyasphere 400 grades are characterized by higher strength closed-cell expanded perlites and are available at different density levels and in coarse, medium, fine and extra-fine particle sizes.

Properties	D10 (µm)	D50 (µm)	D90 (µm)	Bulk Density (kg/m ³)	Effective Density (g/cc)	Brightness L*	Uniaxial strength (MPa)
Omyasphere 412C-BU	450	750	1050	120	0.60	72	0.40
Omyasphere 427M-BU	150	235	350	270	0.45	85	1.50
Omyasphere 430M-BU	75	160	270	300	0.60	77	1.90
Omyasphere 435M-BU	115	185	275	350	0.70	83	3.91
Omyasphere 440M-BU	110	175	240	400	0.85	85	5.50
Omyasphere 430F-BU	70	105	135	300	0.60	86	3.20
Omyasphere 440F-BU	75	115	160	400	0.85	77	3.60
Omyasphere 450F-BU	75	105	140	500	0.95	74	6.60
Omyasphere 445X-BU	35	55	80	450	0.95	86	7.40

Omyasphere 900

Hollow glass microspheres



Omyasphere 900: grade selection

Omyasphere 900 lightweight fillers are based on soda lime borosilicate glass. They are spherical and hermetic microspheres with low density, high compressive strength and high brightness. Key grades for construction applications are given in the following table. Additional products, for specific requirements, are available upon request.

Properties	D50 (mm)	D90 (mm)	Bulk Density (g/cm ³)	True Density (g/cm ³)	Compressive Strength (MPa/psi)
Omyasphere 915-CNZ	85	120	0.09	0.15	4/500
Omyasphere 920-CNZ	65	110	0.11	0.20	4/500
Omyasphere 922 S-CNZ	45	70	0.12	0.22	8/1200
Omyasphere 925-CNZ	65	100	0.14	0.25	5/750
Omyasphere 928 S-CNZ	45	65	0.16	0.28	28/4000
Omyasphere 938-CNZ	40	65	0.21	0.38	38/5500
Omyasphere 938 S-CNZ	30	50	0.21	0.38	38/5500
Omyasphere 942 S-CNZ	25	40	0.23	0.42	55/8000

One product range, countless solutions

Mirroring the variety of the construction market, Omyasphere solutions can offer the best support for your applications and project requirements. We provide technical advice to customers worldwide to support the incorporation of Omyasphere into your product formulation and to achieve the related benefits.

Handling and dosing recommendations:

All information about the Omyasphere series are available and can be shared upon request to: lightweightfillers@omya.com

They include guidance for:

- Unloading, conveying and dosing instructions from bulk, big-bags, paper-bags and carton boxes,
- Mixing and processing Omyaspheres into specific applications.

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Source: Omya International (2025/07)

A global supply reliability:

Omyasphere is reliably available around the world, sourced through our strong, experienced supply chain with efficient logistics available from our regional warehouse network.