

Make your life easier with lightweight fillers



# Omyasphere® 200 series

For Elastomeric and  
High Reflective Coatings



THINKING OF TOMORROW

# Improving the performance and savings in elastomeric and high reflective coatings by using Omyasphere 200 series

Omyasphere 200 series, lightweight fillers based on closed-cell expanded perlite, leads to density reduction of elastomeric and solar reflective roof coatings increasing the yield and solids by volume while enhancing elongation and reducing weathering of final system.

Thanks to its functionality, the addition of 3 to 5% by weight of Omyasphere 200 series by replacing on the volume basis the "heavier" mineral fillers (e.g. calcium carbonate, talc), leads to great potential to support improvement in elastomeric and high reflective roof coating properties, especially weight, dry film thickness, elongation, thermal conductivity and solar reflectivity Index (SRI).



## Case Study

4% by weight of Omyasphere 200 series (effective density 0,3 g/cc) replaces equivalent volume of filler (density 2,7 g/cc) reducing 25% de density of the final roof coating improving the elasticity by 40% and enhancing solar reflectivity index (SRI) and reducing the thermal conductivity by 50%.

	Reference % by weight	Lightweight formulation % by weight
Water	11.80	15.09
Dispersing agent	0.40	0.40
Dispersing agent	0.12	0.16
pH regulator	0.08	0.11
Rheology modifier	0.35	0.46
Rheology modifier	0.42	0.54
Defoamer	0.16	0.14
Coalescent agent	0.58	0.76
PP glycol	2.00	2.65
Filler	34.95	11.40
TiO <sub>2</sub>	5.83	7.69
ZnO	3.88	5.08
<b>Omyasphere 200 series</b>	-	<b>4.0</b>
Acrylic polymer	39.10	51.33
Defoamer	0.16	0.21
Biocide	0.17	0.23
<b>Sum</b>	<b>100</b>	<b>100</b>

Each bucket contain same volume of binder, TiO<sub>2</sub>, additives etc. The difference is the large replacement of part of the filler by Omyasphere 200 series.

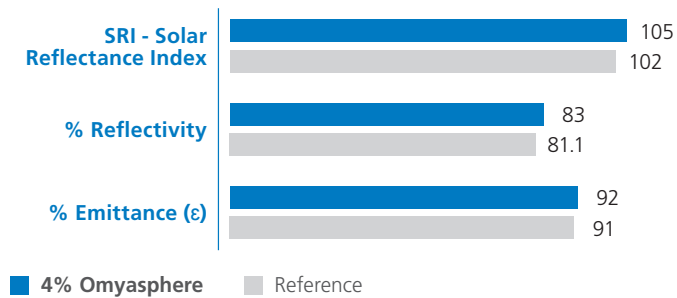
### Density (g/cc)



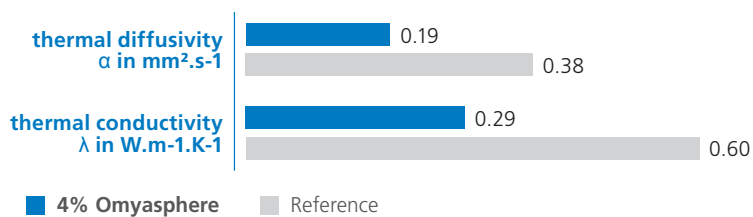
### Elongation (%) -ASTM D2370/D624



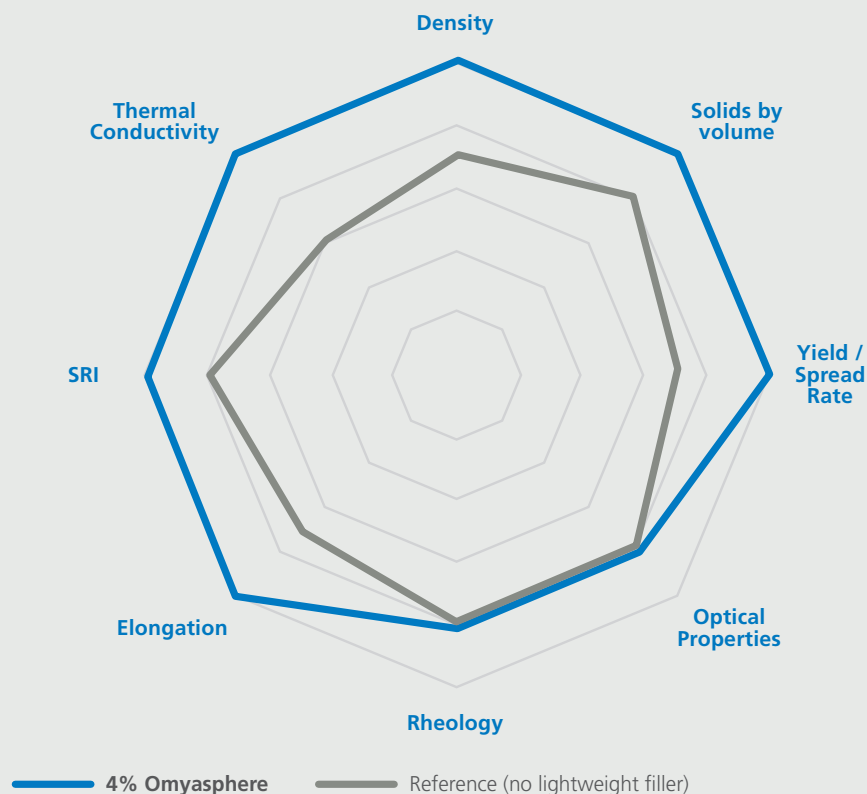
### Solar Reflectivity Index -ASTM E 1980



### Thermal Conductivity -ISO 22007-2:2008



## Score Card



## Benefits

- *Density reduction & yield improvement*
- *Higher solids by volume leads to higher dry film thickness*
- *Enhanced flexibility*
- *Energy savings based on enhanced SRI and reduced thermal conductivity*

**Omyasphere** is a registered trademark of Omya AG in the European Union and multiple other countries.

Omya International AG, Baslerstrasse 42, CH-4665 Oftringen, [www.omya.com](http://www.omya.com), email: [lightweightfillers@omya.com](mailto:lightweightfillers@omya.com)



Omya has taken every possible care to ensure that the information herein is correct in all aspects. However, Omya cannot be held responsible for any errors or omissions which may be found herein, nor will it accept responsibility for any use which may be of the information, the same having been given in good faith, but without legal responsibility. This information does not give rise to any warranties of any kind, expressed or implied, including fitness for purpose and non-infringement of intellectual property. The technical information presented comprises typical data and should not be taken as representing a specification. Omya reserves the right to change any of the data without notice.