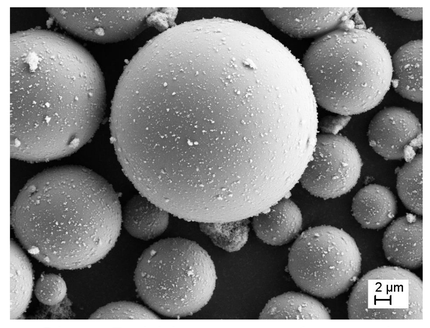
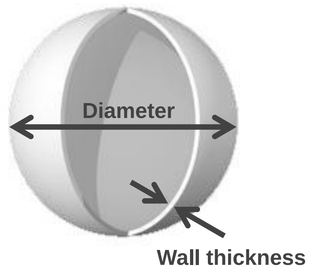
GLOXIL iM16k A
Functionalized hollow glass spheres
The easy way towards future

Base material

3M™ Glass Bubbles iM16k		
Shape		Hollow, thin-walled, single-cellular spheres
Composition		Borosilicate glass, chemical and water resistant
Color		white
Hardness	Mohs Scale	5
Softening temperature	[°C]	600
Density	[g/cm³]	0.46
Average particle diameter	[µm]	20
Isostatic collapse strength	[MPa] [psi]	110 16000



Glass Bubble as manufactured



Functionalization

A special process creates the Gloxil iM16k A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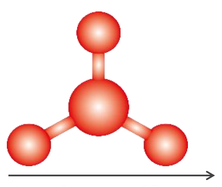

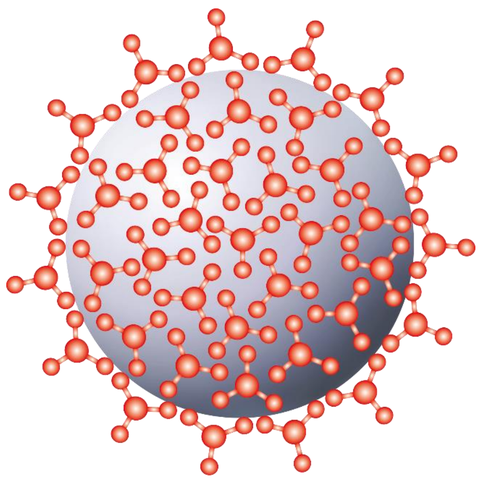
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Characteristics		
Color L* (CIELAB)		98
Density	[g/cm³]	0.46
Bulk density	g/cm³	0.19
Particle size D_{50}	[µm]	22
Particle size D_{97}	[µm]	45
Specific surface area BET	[m²/g]	2
Air jet screening >125 µm	[%]	0.2
Volatile matter at 105 °C	%	0.3
Flotation rate	[%]	96
pH		10
Functionalization		Amino

Typical properties, no specification

Objective

Positive effects with the surface functionalized Gloxil iM16k A on the mechanical property profile of Polyamide and Polypropylene.