

UNITED MINERAL & CHEMICAL CORP.

Expanded Glass Spheres



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Key Benefits Of Using Stikloporas Expanded Glass Granules

Lightweight Particle

- From 1.58 lbs/gal to 3.33 lbs/gal
- Higher formulation yield
- Lower freight costs
- Improved user satisfaction; manual mixing/ ease of handling
- Multiple grain sizes allows for optimal packing of other filler pigments
- Potential for high film builds

- Achieve higher thermal insulation
- Increased sound absorption
- Improved trowelability/ workability
- Less shrinkage and cracking
- Higher compressive strength
- Improved mechanical properties; modulus, flexibility

Porous Foam-like Spheres

Recycled Glass

- Environmentally friendly material without any known negative environmental impacts
- Exterior durable / UV resistant
- Lower water absorption/ binder demand
- Potential to formulate LEED compliant products
- Does not support fire
- Compatible with most binders
- Will not support microorganism growth
- Low temperature resistant up to -350F

EXPANDED GLASS

Technical Data

Designation	Standard	Grain Size					
Grain Size (μ)	LST EN 933-1	100-300	250-500	500-1,000	1,000-2,000	2,000-4,000	4,000-8,000
Mesh		140-50	60-35	35-18	18-10	10-5	5-1
Bulk Density (lbs/gal)	LST EN 1097-3	3.33 ±15%	2.83 ±15%	2.25 ±15%	1.92 ±15%	1.67 ±15%	1.58 ±15%
Compressive Strength (MPa)	LST EN 13055-1, A Annex	>2.5	2.5 ±0.5	2.3 ±0.5	2.0 ±0.5	1.4 ±0.5	1.2 ±0.5
Water Absorption % by mass *	LST EN 1097-6:2002, C Annex	15% ±15%					
pH Value		9-11					
Moisture content on delivery		<0.5%					
Softening Point		700°C / 1300°F					
Color		Cream White					

Common Applications



Stikloporas is a world class producer of lightweight expanded glass granules. Cutting edge technology is used to provide the best thermo & sound insulating properties. The wide range of sizes allows formulators the ability to incorporate these and other benefits into a variety of cementitious and polymer based products.

PACKAGING



Description	Packing Type	Weight (lbs)
Expanded glass granulate 0.1-0.3 mm	Super Sack	1323
Expanded glass granulate 0.1-0.3mm	Plastic Bag	45
Expanded glass granulate 0.25-0.5 mm	Super Sack	1125
Expanded glass granulate 0.25-0.5 mm	Plastic Bag	38
Expanded glass granulate 0.5-1 mm	Super Sack	893
Expanded glass granulate 0.5-1 mm	Plastic Bag	31
Expanded glass granulate 1-2 mm	Super Sack	761
Expanded glass granulate 1-2 mm	Plastic Bag	27
Expanded glass granulate 2-4 mm	Super sack	740
Expanded glass granulate 2-4 mm	Plastic Bag	51
Expanded glass granulate 2-4 mm	Plastic Bag	25
Expanded glass granulate 4-8 mm	Super sack	662
Expanded glass granulate 4-8 mm	Plastic Bag	42
Expanded glass granulate 4-8 mm	Plastic Bag	22

- PE plastic bags have an average loading capacity of 24 pallets on a truck. Typically there are 24-30 bags per pallet. Bags are wrapped, marked, and certified on the pallet.
- Super sacks have an emptying hose and can be reused. Average loading capacity is 24 or 48 supersacks, two on top of each other on one pallet. All pallets are marked and certified.