

TECHNICAL DATA SHEET

USG SUPER™ POLYCARBOXYLATE

SUPERPLASTICIZER

DESCRIPTION

USG Super Polycarboxylate is a liquid or dry powder polycarboxylate-based superplasticizer. It helps disperse cementitious grout particles and break agglomerates, thereby improving the fluidity of cementitious grouts. It can be used to improve the rheological and mechanical properties (i.e.: workability, compressive strength and bending modulus of elasticity), helping to produce the following characteristics:

- Self-leveling
- High resistance to initial compression
- Good workability
- Low water/cement ratio (down to less than 0.22)
- Low cement content and low carbon footprint
- High performance

HOW IT WORKS

For best results, Ultrafine grout must be mixed in a high shear colloidal mixer.

USG Super Polycarboxylate should be premixed with the measured amount of water prior to adding powdered grout.

NEVER MIX USG SUPER POLYCARBOXYLATE WITH ULTRAFINE SD OR WITH USG SUPER POLYNAPHTHALENE. The materials are incompatible and will negatively affect the set time and strength of the cement.

PACKAGING

- 2.5-gallon (9.5 L) plastic container OR
- 20 kg (44 lbs.) dry bag

SHIPPING

- Motor Class 5
- Non-Hazardous

Dry USG Super Polycarboxylate Mix Ratio Guidelines

Water/Grout Ratio	by %	by Wt.	28-Day Strength (PSI)
0.6/1.0	0.5	100 g	6,000+
0.8/1.0	0.4	80 g	3,000+
1.0/1.0	0.3	60 g	2,000+

*Lab tests were performed on neat cement only. No aggregates added.

**Dry USG Super Polycarboxylate is twice as potent as Liquid

Liquid USG Super Polycarboxylate Mix Ratio Guidelines

Water/Grout Ratio	by %	by Wt.	fl. oz.	28-Day Strength (PSI)
0.6/1.0	1.00	200 g	6.7 fl. oz.	6,000+
0.8/1.0	0.75	150 g	5.0 fl. oz.	3,000+
1.0/1.0	0.50	100 g	3.3 fl. oz.	2,000+

*Lab tests were performed on neat cement only. No aggregates added.

DOSAGE RATE

The water grout/ratios in the table are for reference and indicate controlled lab results, with no additional aggregate. Actual field results may vary. Consult the project engineer.

CLEANING PRODUCTS

Use water with light detergent.

STORAGE

Store in temperatures within or near 60°F – 100°F (16°C - 38°C) in a dry atmosphere. Do not subject liquid USG Super Polycarboxylate to freezing temperatures.

SAFETY

Always use OSHA-approved personal protective equipment (PPE). Refer to the SDS for complete safety precautions. The SDS is available by request or via download at avantigrout.com.

NOTICE

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