

Gopher Grout

Granular bentonite grouting composition

APPLICATIONS

- Sealing and grouting casing
- Sanitary sealing in water well construction
- Sealing monitor wells
- Plugging and abandoning exploration boreholes

ADVANTAGES

- Is inorganic, nonfermenting, and nontoxic
- Develops low-solids slurries up to 20% total active solids
- Is easily mixed and handled with most conventional mixing equipment
- Prevents entry of surface contaminants with permanent, flexible seal
- Extends working time controlled by grout solids content
- Provides structural stability after grout set

LIMITATIONS

- When used as recommended, there are no limitations imposed on this product.

Gopher Grout* granular bentonite grouting composition is designed for use in water wells and monitoring wells, for sealing the annular space around well casing and for plugging drilled holes and abandoned wells. It contains no organic additives or polymers.

A single-sack formulation of Gopher Grout composition mixes with freshwater to yield 20%-pumpable grouting slurry with an extended working time. When set up, the composition develops a satisfactory seal with adequate structural strength and low-hydraulic conductivity. When properly placed, it remains flexible, rehydratable, and unstratified through heating and cooling cycles.

Addition methods

Gopher Grout composition should be mixed with freshwater to obtain maximum results. The recommended mixing rate is a 50-lb [22.7-kg] sack of composition with 24 galUS [91 L] of water to make a 20%-active-solids slurry. Adjust the amount of water to alter viscosity and consistency.

Waterwell mixing procedures

1. Using a mixing device, blend one 50-lb [22.7-kg] sack of Gopher Grout composition into 24 galUS [91 L] of freshwater.
2. Blend and do not over-mix. The resulting slurry should be like lumpy cake batter. Pump through a tremie line without delay.

Geothermal mixing procedures

1. Start the mixing device in 24 galUS [91 L] of freshwater and add one 50-lb [22.7-kg] sack of Gopher Grout composition.
2. Mix for approximately 1 min.
3. Add silica sand at a steady, continuous rate for approximately 2 min. Continue mixing until a consistent mixture is reached.

Toxicity and handling

Bioassay information available upon request. Handle as an industrial chemical, wearing protective equipment and observing the precautions described in the MSDS.

Packaging and storage

Gopher Grout composition is packaged in 50-lb [22.7-kg] heavy-duty multiwall waterproof sacks. Store in a cool, dry place.



Gopher Grout

Typical Physical Properties

Physical appearance	Beige to tan
Screen analysis	90% maximum passing through 20-mesh
Moisture content	8%
Granular specific gravity	2.5
pH (1% solution)	7.0
Slurry density	9.4 lb/galUS [1.1 kg/L] for 20% solids
Dry bulk density	80 lb/ft ³ [1,281 kg/m ³]

Gopher Grout Composition at Various Solids Content

Gopher Grout Composition, lb (kg)	Water, galUS (L)	Solids Content, %	Usable Slurry, galUS (L)	Estimated Working Time, min
50 [22.7]	30 [114]	16.7	33 [125]	30–60
50 [22.7]	28 [106]	17.5	31 [117]	15–30
50 [22.7]	24 [91]	20.0	27 [102]	5–15

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