

MINING / CONSTRUCTION

TEKNITE

POLYMER MODIFIED SPRAYABLE, PUMPABLE CEMENT

DESCRIPTION

Teknite was developed in response to customer demand for a more easily applied gunite with improved adhesion characteristics. Teknite can be pumped through a variety of Minova approved electrical, air-powered, and hydraulic-powered equipment.

Teknite is a non-shrinking cement that dries to a durable off-white finish. Teknite has a pumping life of up to 30 minutes and sets in 5 to 8 hours. Teknite is especially suited for large remediation or preventative sealing. As a pumpable grout, Teknite can be used to fill voids and separations up to 24" in thickness.

USES

Teknite is a high strength cement ideal for quickly coating an entryway or filling a void with a strong durable cement. Uses include the prevention of spalling from moisture ingress, traffic infrastructure repair, preventative sealing, void filling, and helping ensure the structural integrity of mine passages.

ADVANTAGES

- Strong – Over 3,600 psi
- Good adhesion – contains polymer latex for superior adhesion
- Attractive – Dries off-white
- Low rebound - minimizes waste
- Convenient – Teknite can be pumped over 400 feet through standard mine spray hose
- Clean– Minimal dust compared to dry process shotcrete (gunite)
- Non-flammable – No unusual storage or ventilation
- Non-Shrinking – Ideal for filling voids when contact with all surfaces must be maintained



APPLICATION METHOD

Preparation

Remove as much dust, loose or friable materials, mud and other foreign matter that might weaken cement bonding. Clean the surface to be covered with high-pressure water as moisture will allow for a better bond between the product and the base material. Remove or protect objects that are not to be covered with Teknite. Ensure surface temperature of substrate to receive Teknite is 40°F (4.5°C) minimum.

Do not apply when frost is anticipated within 2 days of use. Use of product in extremely high or low temperatures will affect set times.

The best time to apply Teknite is directly after surface preparation, when base material is first exposed. The practical thickness achievable will depend on the orientation of the substrate, the material used, and the geometry of the repair area. Maximum thickness should not exceed 2 inches (50.8 mm) per lift when spraying or 24" when pumping. When pumping Teknite, it is recommended to keep the water-to-powder (w/p) ratio between 0.22 and 0.27.

After coating the area with Teknite and allowing product to set firmly, keep the area moist using a fine-mist water spray for 24 hours in order to generate best results. Ensure there is no standing water.

Purge all Teknite material from the pump and lines upon project completion. Follow machine manufacturers recommendations for any additional cleanup procedures.

TECHNICAL DATA

Our Minova products undergo stringent laboratory and field testing to ensure consistent and high quality.

The following laboratory provided data may vary in practice due to thermal exchange between cement and strata, temperature, and other factors. Technical properties were determined by spray application at an approximate w/p ratio 0.2.

**COMPRESSIVE STRENGTH
ASTM C39**

24 hours	1100 psi (7.5 MPa)
7 days	1670 psi (11.15 MPa)
28 days	3610 psi (24.6 MPa)

**DRY SHINKAGE
ASTM C341**

56 days	-0.083 (%)
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**WET SHINKAGE
ASTM C341**

56 days	0.002 (%)
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**ELASTICITY
ASTM C469**

28 days	2217 (ksi)
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**FREEZE / THAW RESISTANCE
ASTM C666**

216°C	71 %
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**RAPID CHLORIDE PERMEABILITY
ASTM C1202**

28 days	5001 coulombs
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**SAFETY INSTRUCTIONS AND
LIMITATIONS**

Observe the usual precautionary measures for handling chemicals, see Teknite SDS.

Use water to clean material from skin and clothing.

PACKAGING AND TRANSPORTATION

Teknite is available in polyethylene lined 55 lb bags, (48) bags per stretch-wrapped pallet.

STORAGE AND SHELF LIFE

Twelve months, in cool dry conditions.

DISPOSAL

If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Dispose of material in accordance with all applicable federal, state/provincial, and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the sole responsibility of the waste generator.

APPROVALS AND CERTIFICATES



an ISO 9001:2015
Quality Management System Certified Company.

DISCLAIMER

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ADDITIONAL DOCUMENTATION

If further information is required, consult Minova Americas website: www.minovaglobal.com.

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