

TEKTRENCH SYSTEM Dual Component Silicate Grout

Description

The TekTrench System is a pumpable two-component material that is used to construct pillows and breakers/plugs used to support gas, oil or utility pipelines. The ease and speed of installation reduces downtime and improves pipeline installation productivity. The product has superior adhesion and water permeability characteristics making it an excellent choice to slow or stop the ingress of water in trenches.

The TekTrench System eliminates the need to manually handle and place heavy sandbags replacing it with a simple pumped-in-place installation method for trench pillows and breakers/plugs. Worker injury risks are mitigated, and safety is improved as workers no longer need to be in confined trench spaces placing sandbags. Field operational efficiency is also improved, and material consumption rates reduced all the while requiring less manpower. Costs and environmental impact are lowered by not having to ship numerous truckloads of sand to remote locations, thus lowering overall project carbon footprint when compared to traditional sandbag installations.

Advantages

- Installations are safer and more efficient
 - Increased efficiency and cost savings, requires less manpower
 - Improved worker safety, fewer laborers are exposed to working in trenches placing sandbags
- Fire-resistant, Water-permeable material
 - Low exothermic reaction temperature
 - extends pipeline exposure without degradation to the pipe coating
 - Reduces fire hazard risk to the surrounding environment
 - Grade A, lowest (FS) Flame Spread Factor
- Superior Adhesion reduces risk of washout
- Supports cathodic protection, extends pipeline life expectancy
- A lightweight dual component pump can be used to place material from outside of the trench
 - Minova offers multiple pump options determined by application, consult your Minova Sales Representative to determine which option is best for your project
- Cost effective alternative to polyurethane foams and sandbag installations
- Installations support large scale projects,
 - Product manufactured in 946L (250gal) Intermediate Bulk Containers or IBCs



Installed Pillows ready for gas pipeline



Installed Breaker and Pillows for gas pipeline



Installed Breaker for gas pipeline

TEKTRENCH SYSTEM Dual Component Silicate Grout

Industry Sectors



Technical Properties

The following laboratory provided data may vary in practice due to thermal exchange between resin and strata, pressure, and other factors.

Reaction Data

| Initial Temperature | Start of Foaming | End of Foaming | Foaming Factor | Test Procedure |
|------------------------|------------------|----------------|----------------|----------------|
| Density at 25°C (77°F) | 20 s ± 10 s | 45 s ± 15 s | 15-30 | MCT PV 10-303 |

Material Data

| | Component A | | Component B | | Norm |
|--------------------------|-----------------------------|----------------------------------|-----------------------------|------------------------------------|-------------|
| Density at 25°C (77°F) | 1220 ± 15 kg/m ³ | | 1455 ± 30 kg/m ³ | | DIN 12791-1 |
| Color | brown | | brownish-turbid | | |
| Viscosity at 25°C (77°F) | 140 ± 15 mPa*s (cps) | | 260 ± 80 mPa*s (cps) | | ISO 3219 |
| Flash Point | > 200°C (392°F) | | n.a.°C/°F | | DIN 53213 |
| Specific Gravity | @ 15:1 | .09 (.557 lbs/ ft ³) | @ 30:1 | .045 (.2785 lbs/ ft ³) | |

Composition and Properties

Component A is a modified isocyanate.
Component B is a modified water glass.

After mixing, the resin starts foaming within a few seconds forming a lightweight flame-resistant foam.

Instructions for Use

Thoroughly stir both components before and during pumping, as possible. The components are to be pumped at the volumetric ratio of 1:1 by using a dual component pump with final mixing of the materials achieved at the wand via static mixer prior to placement into the trench.

Storage, Shelf Life

Store product out of direct exposure to sunlight as overheating may occur. It is critical to avoid overheating by all means as product degradation may occur.

Shelf-life is expected to be at least six months from date of delivery or twelve months from date of manufacture when product is stored in a dry place between the temperatures of 10°-30°C (50°-86°F).

If either period is exceeded, it is recommended to have the materials quality checked by Minova Quality to insure product specification compliance.

Packaging



Steel Drums

Component A: 190L (50gal)
Component B: 190L (50gal)

Intermediate Bulk Containers (IBCs or Totes)

Component A: 946L (250gal)
Component B: 946L (250gal)



Ex.: Dual Component Pumping System

TEKTRENCH SYSTEM

Dual Component Silicate Grout

Technical Support

Minova provides a technical advisory service by a team of specialists in the field. The service includes on site assistance and advice on evaluation trials and laboratory work.

Additional information

Started more than 40 years ago, Minova is a global manufacturer and supplier of chemical and mechanical earth control products, adhesives and support equipment. With manufacturing plants on five continents and operations in more than 25 countries, Minova is an industry-leading provider of ground support solutions for the underground mining, construction, tunneling and civil engineering industries.

If further information is required consult Minova Americas.

Manufacturer

Trading name of Minova USA, Inc.
150 Summer Court, Georgetown, KY 40324



An ISO 9001:2015,
Quality Management System Certified Company.

Customer Service

Customer.SalesSupport@minovaglobal.com

Phone: +1 800-626-2948

Alt Phone: +1 502-863-6800

Fax: +1 502-863-6805

Disclaimer

All information contained in this document is provided for informational purposes only and is subject to change without notice. Since Minova cannot anticipate or control the conditions under which this information and its products may be used, each user should review the information in the specific context of the intended application. To the maximum extent permitted by law, Minova specifically disclaims all warranties expressed or implied in law, including accuracy, non-infringement, and implied warranties of merchantability or fitness for a particular purpose. Minova specifically disclaims, and will not be responsible for, any liability or damages resulting from the use or reliance upon the information in this document.

The Minova Logo is a registered trademark.

© Registered trademark of Minova International Limited.