

TECHNICAL INFORMATION

URETHANES

PRODUCT NAME

HYDRO ACTIVE[®] Multigel NF
Hydrophilic Polyurethane Gel

MANUFACTURER

De Neef Construction Chemicals, Inc.
5610 Brystone Drive
Houston, TX 77041
1(800) 732-0166

PRODUCT DESCRIPTION

HYDRO ACTIVE[®] Multigel NF is a hydrophilic polyurethane designed to react with water and form a water impermeable gel mass. **HYDRO ACTIVE[®] Multigel NF** is a pale yellow, nonflammable liquid. When it comes into contact with water, the grout begins to foam or gel, and depending on the temperature and amount of water present, quickly cures to a flexible, impermeable foam or gel mass unaffected by mildly corrosive environments. Cure times can be modified using accelerator (Flexgel Cat W) and gel strength can be increased using reinforcing agent.

APPROPRIATE APPLICATIONS

- Stopping infiltration into manholes (brick or concrete).
- Sealing of pipe joints using commercial packer equipment.
- Stabilization of soil
- Potable water tanks and storage
- Curtain wall grouting below grade structures

ADVANTAGES

- Non-flammable
- Contains no volatile solvents
- NSF 61 Potable water approved
- High penetration rate through soils
- Can be injected through remote internal pipe packer equipment
- Grouted soils can be excavated
- **Multigel NF** can be pumped at various grout to water ratios
- Adjustable set times

TYPICAL PROPERTIES

Uncured

Solids	78%	ASTM D 2369 B
Viscosity at 77°F	200-300 cps	ASTM D 2196 A
Color	Yellow	
Flashpoint	225°F	ASTM D 93

Cured

Tensile Strength Wet 10% Reinf. Agent (Mixed 6:1 w/water)	22-34 psi	ASTM D 1564
Tensile Strength Wet 20% Reinf. Agent (Mixed 6:1 w/water)	28-49 psi	ASTM D 1564
Gel time	50 seconds at 70° F	
Shrinkage	No shrinkage was observed after one week at 70°F and relative humidity of 100%.	
Influence of pH	Gel time increases with decreasing pH values.	
Compressive Strength in Soil Mixed 1:1w/water	375 psi	
Compressive Strength in Soil Mixed 6:1 w/ water	202 psi	
Cured materials	Resistant against normal sewer effluents.	

The data shown above reflects typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result.

Water Side Additives

Flexgel Cat Water Side		
Appearance	Pale white	
Viscosity	5 -15 cps at 70°F	ASTM D 2196 A
Flashpoint	350°F	ASTM D 93
Reinforcing Agent		
Appearance	Milky white (latex based)	
Viscosity	20-50 cps at 70°F	ASTM D 2196 A
Flashpoint	>212°F	ASTM D 93

Caution: Add Reinforcing Agent at waterside!

PACKAGING

HYDRO ACTIVE® Multigel NF:

- 55 gallon metal drums sealed under dry nitrogen
- 5 gallon metal pails sealed under dry nitrogen.
- 10.5 oz cartridges

Flexgel Cat W: 64 oz. Bottle.

Reinforcing Agent: 1 gal bottle or 5 gal pail

LIMITATIONS

Low temperatures will significantly increase viscosity. If site temperatures are extremely low, heat bands or warm water baths can be used before and during installation to maintain the products temperature. Allow no water into open containers, as the material is water activated. Avoid exceeding 90°F when warming.

CAUTION – pH NOTICE. Water used to activate HYDRO ACTIVE Grouts must be in a range of pH 3 –10 for optimum grout quality.

SURFACE PREPARATION

Refer to DeNeef Surface Preparation Guidelines for more details.

INSTALLATION PROCEDURES

HYDRO ACTIVE® Multigel NF should be pumped with a *plural component pump*. Prior to installation the material should be agitated by vigorously shaking or using a jiffy mixer or bung mixer. HYDRO ACTIVE® Multigel NF is cured by reaction with water. The properties of the cured product are determined by the mix ratio. Combining HYDRO ACTIVE® Multigel NF and water at 1:1 volume ratio yields a very flexible foam with good tear resistance. In the range of 2:1 to 8:1, a strong gel is obtained. Adding Reinforcing Agent up to 50% on the waterside to HYDRO ACTIVE® Multigel NF will increase grout strength and reduce shrinkage if ground water levels vary. The addition of Reinforcing Agent will also accelerate the setting time of HYDRO ACTIVE® Multigel NF. Acceleration can also be achieved by adding Flexgel Cat W to the waterside up to 64 ounces per 5 gallons of HYDRO ACTIVE® Multigel NF.

Mix Ratio

Foam	<i>Strong Gel</i>				Flaccid Gel	
1:1	2:1	4:1	6:1	8:1	10:1	12:1

STORAGE & HANDLING

Store in a dry area using original resealable containers.

Warning! If HYDRO ACTIVE® Flexgel Cat W or Reinforcing Agent are allowed to freeze it will lower performance and possibly render material ineffective.

PRECAUTIONS

Always use protective clothing, gloves and goggles consistent with OSHA regulations. Avoid eye and skin contact. Do not ingest. Refer to Material Safety Data Sheet for detailed safety precautions.

SAFETY INFORMATION

In the event of an EMERGENCY call:
CHEM-TREC 800-424-9300.

WARRANTY INFORMATION

De Neef Construction Chemicals, Inc. products are warranted under the policy set forth under the WARRANTY section of the De Neef Construction Chemicals Inc., product catalog. Warranty information can also be obtained via the De Neef Construction Chemicals Inc. website at www.deneef.com, or by calling 713-896-0123 or toll free at 1-800-732-0166.

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DRINKING WATER SYSTEM COMPONENTS
ANSI/NSF 61
3N76

“HYDRO ACTIVE® MULTIGEL NF”
MAXIMUM SURFACE AREA TO VOLUME RATIO
5.4CM²/L AT 23°C

