

# TECHNICAL INFORMATION

## URETHANES

### PRODUCT NAME

## HYDRO ACTIVE<sup>®</sup> Flex 1000

Hydrophobic Polyurethane Grout

### MANUFACTURER

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

### PRODUCT DESCRIPTION

HYDRO ACTIVE<sup>®</sup> Flex 1000 is a hydrophobic polyurethane that, when mixed with HYDRO ACTIVE<sup>®</sup> Flex Cat, is designed to seal leaking joints and cracks in concrete structures. HYDRO ACTIVE<sup>®</sup> Flex 1000 forms a flexible gasket or plug in the joint or crack. In its uncured form, HYDRO ACTIVE<sup>®</sup> Flex 1000 is a milky white nonflammable liquid. When it comes into contact with water, the grout expands and depending on the temperature and amount of accelerator used (HYDRO ACTIVE<sup>®</sup> Flex Cat) quickly cures to a tough flexible, closed-cell foam that is essentially unaffected by corrosive environments.

### APPROPRIATE APPLICATIONS

- Filling joints and cracks in concrete structures that exhibit some movement.
- Filling joints, cracks, and voids in concrete structures where free foaming cannot be avoided.
- Filling wide crack in horizontal structures where the backside of the crack cannot be surface sealed.

### ADVANTAGES

- Non-Flammable
- Single Component
- Free foam expansion up to 8 times the liquid volume
- Retains elasticity even under harsh conditions
- Unaffected by corrosive environments
- Excellent Resistance to weathering
- Contains no volatile solvents

### TYPICAL PROPERTIES

Uncured		
Solids	100%	ASTM D 2369 B
Viscosity at 77°F	1100 cps ± 200	ASTM D 2196 A
Color	Milky White	
Density	8.76 lbs/gal	ASTM D 3574
Flashpoint	>270°F	ASTM D 92
Corrosiveness	Non-corrosive	
Toxicity	Non-toxic	
Flex Cat		
Appearance	Transparent Liquid	
Viscosity at 77°F	5-16 cps	ASTM D 2196 A
Flashpoint	>200° F	ASTM D 92
Cured		
Density	8.7 – 9.5 lbs/gal	ASTM D 3574
Tensile Strength	150 psi	ASTM D 412
Elongation	250%	ASTM D 3574
Bond Strength	130 psi	
Shrinkage	Less than 4%	ASTM D 1042
Toxicity	Non-toxic	

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

### Reactivity

	%HYDRO ACTIVE <sup>®</sup> Flex Cat	Induction time	Geltime in min-sec
* at 45° F	0.5%	5'40"	13'50"
	1.0%	2'45"	7'50"
	3.0%	1'45"	4'40"
	5.0%	1'20"	4'20"
* at 62° F	0.5%	4'30"	13'30"
	1.0%	2'20"	7' 10"
	3.0%	1'23"	4' 15"
	5.0%	49"	2' 15"

Example - 1% Flex Cat = 1.3 oz. per gallon of Grout  
Note: Shake the can of Flex Cat well before adding to resin.

## PACKAGING

### HYDRO ACTIVE® Flex 1000:

- 55 gallon metal drum sealed under dry nitrogen.
- 5 gal metal pail sealed under dry nitrogen.

### HYDRO ACTIVE® Flex Cat Accelerator:

- 25 oz. cans.

## LIMITATIONS

Low temperatures will significantly affect viscosity. If site temperatures are extremely low, heat bands or heated water baths may be used on the pails before and during installation to maintain the product's temperature. Avoid splashing 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 foam quality.

## SURFACE PREPARATION

Refer to De Neef Surface Preparation Guidelines for more details.

## INSTALLATION PROCEDURES

Prior to installation, both the grout and accelerator must be agitated separately before combining by vigorously shaking the containers or by mixing with a jiffy mixer. The grout should never be used with more HYDRO ACTIVE® Flex Cat than the amount recommended on this data sheet. Excess acceleration will cause a vigorous expansion that is prone to shrinkage. Pour the desired amount of HYDRO ACTIVE® Flex 1000 into a clean pail. Measure the appropriate amount of HYDRO ACTIVE® Flex Cat and pour it into the HYDRO ACTIVE® Flex 1000 and stir until adequately mixed. During injection the grout will follow the path of least resistance. When the material has stopped penetrating it will continue to expand against the confines of the crack/joint and compress within itself, forming a very dense, closed cell material stopping the leak.

For application procedures in extreme temperatures and specific environments or equipment recommendations call the DeNeef Technical Service Department.

## STORAGE & HANDLING

Store in dry area using original Resealable Containers.

**Warning!** If HYDRO ACTIVE® Flex Cat is allowed to freeze, it will lower performance.

## PRECAUTIONS

Always use protective clothing, gloves and goggles consistent with OSHA regulations during use. 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

DeNeef 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](http://www.deneef.com), or by calling 713-896-0123 or toll free at 1-800-732-0166.

Rev. 07/2006