



Infrastructure Portfolio

# Polyurethane

















### DeNeef<sup>®</sup> CUT PURe<sup>™</sup>

High expansion hydrophobic polyurethane grout.

Advantages	Applications
Single component	Stopping high water flows
NSF/ANSI 61 potable water approved	Manhole grouting
Will not dilute in water	Probe grouting
3 speeds of catalyst available	Soil stabilization

### DeNeef<sup>®</sup> SEALFOAM PURe<sup>™</sup>

Moderate expansion hydrophilic polyurethane grout.

Advantages	Applications
Single component	Manhole joints
NSF/ANSI 61 potable water approved	Storm pipe joints
Cures to a flexible foam	Soaked oakum
200% elongation	Pipe penetrations

## HYDRO ACTIVE® Multigel NF

Multi-ratio hydrophilic polyurethane grout.

Advantages	Applications
Can be pumped at multiple ratios	Mainline sewer pipe joints
NSF/ANSI 61 potable water approved	Lateral sewer pipe joints
Optional catalyst available	RCP pipe joints
Can be used with remote packers	Manhole grouting

### Manhole grouting

High expansion two component hydrophobic polyurethane grout.

Advantages	Applications
20 second rise time	Stopping high water flows
40 second rise time	Void filling around manholes
Reacts underwater	Void filling under structures
No shrinkage	Annular grouting

# Acrylate



### AC-400®

Acrylate monomer for sealing sewer lines and general water control.

Advantages	Applications
Contains no acrylamide monomers	Mainline & lateral pipe joints
Very low toxicity	Support of excavation
Extremely low viscosity (1-3 cps)	Water control
Can be used with remote packers	Manhole grouting



### Gelacryl SR™

Acrylate monomer for sealing sewer lines.

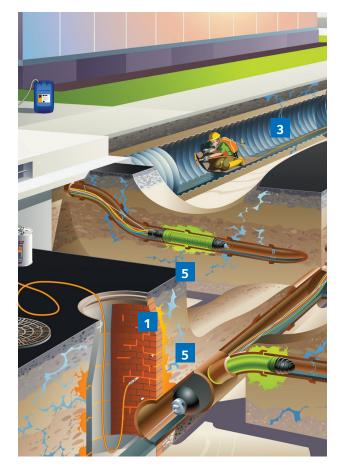
Advantages	Applications
Contains no acrylamide monomers	Mainline sewer pipe joints
Very low toxicity	Lateral sewer pipe joints
Extremely low viscosity (1-3 cps)	Water control
Can be used with remote packers	Curtain grouting



### **Gelacryl Superflex™**

Flexible methacrylic acrylate copolymer for sealing concrete structures.

Advantages	Applications
Contains no acrylamide monomers	Precast joints
NSF/ANSI 61 potable water compliant	Concrete joints
300% elongation	Cracks in concrete
Excellent adhesion	Curtain grouting





# 1. Manholes

Inflow and infiltration (I & I) studies have shown that over 50% of the ground and surface water that enters a municipal sewer system does so through manholes. This I & I greatly increases the effluent volume, thereby raising treatment costs. Groundwater carries fine soils into collection systems reducing flow capacity and leaving exterior voids around manholes, eventually leading to sink holes, roadway collapse, and even catastrophic system failure. GCP offers a wide range of solutions to various I & I issues:

### **High Water Flows**

Stemmed quickly and efficiently with Aqua-Tite<sup>™</sup>, a rapid-set highly expansive polyurethane.

### Leaking Penetrations and Joints

Packed with active oakum and injected with DeNeef® SEALFOAM PURe™ providing a permanent and flexible seal.

### Manhole Sealing

Injected with CUT PURe<sup>™</sup>, HYDRO ACTIVE<sup>®</sup> Multigel NF, or AC-400<sup>®</sup> from within the manhole into the surrounding soil to create waterproof curtain completely around the structure.

When a successfully applied lining system is your goal, stopping the infiltration should be your first step.

# 2. Probe Grouting

Probe grouting offers a targeted and effective method to solve infiltration or soil stabilization problems around pipes, manholes and culverts. Whether your issue is three feet below the surface or thirty, probe pipes can be driven through the soils to allow delivery of repair materials directly to the trouble area.

CUT PURe<sup>™</sup> is the most widely utilized single component polyurethane grout in the world. This versatile material can create a waterproofing seal, stabilize soils, or fill voids. AC-400<sup>®</sup> is the original acrylate monomer grout that can consolidate loose earth for support of excavations or create a water control barrier in the soil.



## 3. Storm Pipes & Culverts

Storm water structures represent a significant and frequently underestimated challenge to collection systems. Even small leaks will allow surrounding soil loss, leading to voids, settlement, roadway damage, and flow restriction.

CUT PURe<sup>™</sup> injected into the supporting earth provides an economical and permanent solution to these problems.

Even when water has fully undermined a structure, injecting this single component polyurethane will:

- 1. Stop the flowing water
- 2. Fill voids created by seepage
- 3. Stabilize the supporting soils.

Three issues solved with one efficient process!.

## 4-5. Mainline and Lateral Grouting

Rehabilitation of sewer lines and laterals with chemical grout and remote packers is a cornerstone of infrastructure repair. As communities become increasingly knowledgeable about the environmental impact of infrastructure repair materials, the need for "greener" and "safer" grouts is growing.

GCP manufactures several proven alternatives to acrylamide-based grouts. These grouts have long been industry staples in European countries and are rapidly gaining market share in North America.

### **Acrylamide-Free Solutions**

AC-400<sup>®</sup> The original acrylate grout

Gelacryl SR™ An advanced acrylate blend

**Multigel NF** Fast-acting wide-ratio polyurethane

## Portfolio

### **Polyurethane Chemical Grouts**

DeNeef PURe<sup>™</sup> – Phthalate free injectable resins HYDRO ACTIVE® – Multi ratio resin Two Components – Specialty resins

#### **Acrylate Chemical Grouts**

AC-400<sup>®</sup> – Sewer & soil stabilization resin Gelacryl<sup>™</sup> – Two component acrylic resin Gelacryl SR<sup>™</sup> – Sewer repair resin Superflex<sup>™</sup> – Flexible injectable resin

#### **MICROFINE®** Cements

MC 300<sup>®</sup> – Ultrafine cement MC-500<sup>®</sup> – Microfine cement MC-800<sup>™</sup> – Fine cement

### **High Performance Waterstops**

SWELLSEAL<sup>®</sup> – Hydrophilic swelling strips INJECTO<sup>®</sup> – Injectable grout hose system TRIOject<sup>™</sup> – Multi-injectable grout hose system

#### **Epoxies**

Denepox<sup>™</sup> I-40 – Low viscosity injectable epoxy Denepox<sup>™</sup> Gels – Surface gels

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