

# TECHNICAL INFORMATION

## URETHANES

### PRODUCT NAME

## Dene-Lift 400

Two Component Rigid Foam

### MANUFACTURER

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

### PRODUCT DESCRIPTION

**Dene-Lift 400** is a two component rigid polyurethane system for injection and pour foam applications. This foam has low viscosity, specifically designed to produce a rigid foam for slab and road jacking as well as pole setting in lieu of concrete. Other uses included tooling, mold fabrication, and void filling.

This product has excellent processing characteristics. Good dimensional stability and adhesion to substrate.

**Dene-Lift 400** can be custom formulated in densities ranging from 3 lb. – 15 lb.

### APPROPRIATE APPLICATIONS

- Slab Jacking
- Road Jacking
- Void Filling
- Pole Setting

### ADVANTAGES

- Hydrolytically stable.
- No Heavy metal catalysts
- No Ozone Depleting Products (ODP)
- No Bromine or other Halogenated components
- No Formaldehyde Components
- Mildew, Bacteria and Fungus Resistant
- Considered safe for burial and landfill disposal

### TYPICAL PROPERTIES

#### Component Properties

PROPERTY	A (Isocyanate)	B (Resin)
Color	Amber	Clear
Viscosity @ 77°F (25°C)	195 cps	~700cps
Bulk Density	10.7 lbs/gal	10.2 lbs/gal
Mixing Ratio (Volume)	1	1

#### Physical Properties

Core Density (Free Rise)	4.6 lb/ft <sup>3</sup>	
*Cream	1 min.	
*Rise	3 min.	
Expansion (free foam)	14 X	
Compressive Strength	78 psi	ASTM D 1621
Tensile Strength	140 psi	ASTM D 1623
Elongation	25%	ASTM D 1623
Flexural Strength	112 psi	ASTM D 790
Coefficient of Thermal Expansion	62.5 x 10 <sup>-6</sup> ASTM D 696	

\*The reactivity profile of the foam can be varied as needed. The samples for tests were sprayed with Gusmer 20/35 @ 1200 psi dynamic pressure primary and hose heat @ 135°F (57°C). Gap Pro gun with 00 chamber.

### PACKAGING

**Dene-Lift 400** is available in 100 Gallon Drum Sets and 500 Gallon Tote Sets.

### LIMITATIONS

- This product has not been tested for flame spread or smoke development.
- Not to be installed within two inches (2") of heat emitting devices, where temperature is in excess of Two Hundred Degrees Fahrenheit (200°F).
- This product is for professional use only.
- Minimum material/container temperature for spray application is 70°F (21°C).
- Avoid moisture contamination in containers. Containers should not be resealed if contamination is suspected, CO<sub>2</sub> created pressure can develop. Do not attempt to use contaminated material.

## **SURFACE PREPARATION**

Refer to De Neef Surface Preparation Guidelines for more details.

## **INSTALLATION PROCEDURES**

- Standard 1:1 ratio, heated, plural component equipment developing a minimum of 1200psi (8.34mpa) dynamic pressure with heating capabilities to 150°F (66°C) will adequately spray this product. These include Gusmer HV-20/35, Gusmer 20/35 SPI-Gusmer 25/25, \*SPI-Gusmer FF18/18. Gun models include: Gusmer AR-250, SPI-Gusmer Model D-7, Gusmer GX7 and Gap Pro.
- Pre-heater temperature should be a minimum of 120°F – 140°F (48°C – 60°C).
- Hose temperature should be 120°F – 140°F (48°C – 60°C). A hose thermometer inserted under the insulation near the gun should read a minimum of 105°F (40°C).
- Substrate temperature should be a minimum of 50°F (10°C).

*\*Outputs over 10 lb per minute with the FF-18/18 will require pre heating material or utilizing an Arctic Booster Pack.*

## **STORAGE & HANDLING**

Both components should be stored in a dry place at temperatures between 60°F and 90°F (15°C-32°C). Do not thin with solvents. Confirm product performance in specific chemical environment prior to use. Substrate temperature must be at least 5°F above the dew point.

## **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.

**NOTE:** Polyurethane Foam products under certain conditions may present a significant fire hazard. The potential for such hazard depends upon a broad range of factors influenced by the manufacturer or user of the product. Any person or firm engaged in the use of Polyurethane Foam materials should carefully determine the potential for fire in their processes and use all precautions outlined by local, state, and federal regulations.

**Clean Up:** Use DPM, NMP, Polyclean.

**Contamination:** Avoid moisture contamination in containers. Containers should not be resealed if contamination is suspected, carbon dioxide created pressure can develop. Do not attempt to use contaminated material.

**Eye Protection:** Safety glasses, goggles, or a face shield are recommended.

**Skin Protection:** Chemical resistant gloves are recommended. Cover as much exposed skin area with appropriate clothing as possible.

**Respiratory Protection:** Use a respirator approved for isocyanates and organic vapors. If you are not sure or not able to monitor levels, use MSHA/NIOSH approved supplied air respirator. Consider the application and environmental concentrations in deciding if additional protective measures are necessary.

**Ingestion:** Do not take internally. It is believed that ingestion of polymeric isocyanates would not be fatal to humans, but may cause inflammation of mouth and stomach tissue.

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

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