DE NEEF® Dene-Lift 400

Two Component Polyurethane Foam

Product Description

DE NEEF® 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.

Product Applications

- Slab jacking
- Road jacking
- Void filling

Product 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
- Safe for burial and landfill disposal

Packaging & Handling

Packaging:

100 gallon drum sets
500 gallon tote sets

Both components should be stored in a dry place at temperatures between 60°F and 90°F (15°C-32°C).

Installation Guidelines

Warning: Consult the Technical Data Sheets and SDS before using.

Installation Instructions: 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. For detailed installation instructions refer to the DE NEEF® technical bulletin for your application.
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).

**Injection:** During injection the grout will follow the path of least resistance. When the material has stopped penetrating it will continue to expand against the limits of the confined space and compress within itself, forming a dense, closed cell foam.

**Extreme conditions:** For application procedures in extreme temperatures and specific environments or equipment recommendations call the DE NEEF® Technical Service Department.

**Cleaning:** Clean all tools and equipment which have been in contact with the resin with DE NEEF® Washing Agent before resin has cured. Products should be disposed of according to local, state, and federal laws.

**Limitations**

DE NEEF® Dene-Lift 400 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 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, CO2 pressure can develop. Do not attempt to use contaminated material.

**Health and Safety**

Always use protective clothing, gloves and goggles consistent with OSHA regulations. Avoid eye and skin contact. Do not ingest. Refer to SDS. For emergencies, call CHEMTREC 1-800-424-9300.

**Properties**

<table>
<thead>
<tr>
<th>DE NEEF® DENE-LIFT 400</th>
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</thead>
<tbody>
<tr>
<td>Viscosity Part A 77°F</td>
<td>195 cps</td>
</tr>
<tr>
<td>Viscosity Part B 77°F</td>
<td>700 cps</td>
</tr>
<tr>
<td>Mixing ratio by volume</td>
<td>1:1 (A:B)</td>
</tr>
<tr>
<td>PROPERTY</td>
<td>CURED</td>
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<td>--------------------------------</td>
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</tr>
<tr>
<td>Density</td>
<td>4.6 pcf</td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>78 psi</td>
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<tr>
<td>Tensile Strength</td>
<td>140 psi</td>
</tr>
<tr>
<td>Elongation</td>
<td>25%</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>112 psi</td>
</tr>
<tr>
<td>Coefficient of Thermal Expansion</td>
<td>62.5 x 10^{-5}</td>
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<tr>
<td>*Cream</td>
<td>1 min.</td>
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<tr>
<td>*Rise</td>
<td>3 min.</td>
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<tr>
<td>Maximum use Temp.</td>
<td>200°F</td>
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</table>
Expansion 14 V (volumes)

Note: 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.