

# TECHNICAL INFORMATION EPOXIES

#### PRODUCT NAME

### Denepox Aqua Gel

Two Component Underwater Epoxy Gel

#### MANUFACTURER

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

#### **PRODUCT DESCRIPTION**

**Denepox Aqua Gel** – 100% solids, two component, underwater, epoxy gel system that will cure equally well above or below water; bonding all construction materials. It has superior wetting qualities that tend to increase its bond strength. This product meets ASTM C-881, Type: II, Grade: 3, Class: B & C.

#### **APPROPRIATE APPLICATIONS**

- Bonding all construction materials
- Underwater applications

#### **ADVANTAGES**

- 100% solids
- Non-sag gel
- Excellent adhesion
- Moisture insensitive cures underwater
- Abrasion and impact resistant
- Easy application

#### PACKAGING

Available in 2 and 10 gallon units

#### LIMITATIONS

Application at ambient or water temperature below 45°F is not recommended. Where possible, protect treated areas against impact or strong currents for 48 hours. Exposure to temperatures exceeding 150°F for prolonged periods is not recommended.

| PHYSICAL PROPERTIES           |                        |             |
|-------------------------------|------------------------|-------------|
|                               | PART A                 | PART B      |
| Solids                        | 100%                   | 100%        |
| Color                         | White                  | Black       |
| Wt./Gal.                      | 12.13 lb.              | 10.94 lb.   |
| Shelf Life                    | 1 year                 | 1 year      |
|                               | PROPERTIES             | ASTM METHOD |
| Blended Color                 | Gray                   | Visual      |
| Mix Ratio                     | 1:1 by volume<br>(A:B) | N/A         |
| Viscosity                     | Non Sagging<br>Gel     | N/A         |
| Pot Life (3 oz.)<br>@ 77°F    | 40 minutes             | N/A         |
| Hardness<br>(shore) @<br>77°F | 75-D ±5%               | D-2240      |
| Gel Time (5<br>mil) @ 77°F    | 6-8 hours              | N/A         |
| Tensile<br>Strength           | 5,000 psi              | D-638       |
| Flexural<br>Strength          | 3,000 psi              | D-790       |
| Compressive<br>Strength       | 5,000 psi              | D-695       |
| Bond Strength                 | 500 psi (24<br>hours)  | C-321       |
| Elongation @<br>77°F          | 25%                    | D-638       |
| Water<br>Absorption           | 0.25%n<br>(24hours)    | N/A         |

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

#### SURFACE PREPARATION

**Surface Preparation:** Surface of application should be clean and sound. The surface must be free of any dust, oil, grease, laitance, curing compounds, or any other contaminants. This material is intended for use on either steel or concrete surfaces that are constantly, or intermittently, submerged in fresh or salt water or in splash zone areas. This may involve pilings, abutments, drainage canals or ditches, drilling rigs, structural supports, well jackets, piping and many other items. When coating is desired to arrest corrosion in splash zone areas, the area should be cleaned over an area

## SURFACE PREPARATION (continued)

extending from the top of the splash zone to a depth of one to two feet below the low tide level. With other types of treatment, it is a good practice to clean and treat beyond the affected area to provide a positive, watertight seal. Water blasting, with sand assist, is the best choice for cleaning both concrete and steel. Refer to De Neef Surface Preparation Guidelines for more details.

#### **INSTALLATION PROCEDURES**

<u>Surface Preparation</u>: Look at SURFACE PREPARATION above.

Mixing Procedure: Stir each component separately. Mix 1 part A with 1 part B by volume into a clean mixing container. Mix the epoxy with a slow speed drill with a mixing paddle attachment. Carefully scrape the sides and bottom of the pail during mixing with a paint stirring stick. Blend for 3 minutes. Mix only the amount of materials that can be used within the pot life. Please note: Large batches of epoxy will cure much faster than small batches. Mixed epoxy will cure much faster in hot weather than in cold weather.

Application: Methods will vary depending upon the job conditions and treatment For underwater work, the necessary. applicator needs a skin diving wet suit, rubber gloves, life jacket and a lifeline secured to the structure. Rubber gloves, protective clothing and protective creams are always recommended for other conditions. Denepox Aqua Gel can be applied with a gloved hand. The average thickness of application should vary between 1/8" and 1/4". The coating is easily molded into the shape or contour of the substrate. provided that the rubber gloves are kept wet. The coating should be applied evenly and uniformly without skips or gaps. Coating application can be initiated by depositing a volume of material immediately above the water line and then working or smearing uniformly up and down over the area to be treated. Further edging of all extremities is recommended.

<u>Clean-Up</u>: Remove uncured **Denepox Aqua Gel** from tools and equipment with a suitable solvent such as xylene or toluene immediately after use. Cured material may only be removed mechanically.

#### **STORAGE & HANDLING**

**Shelf Life:** A minimum of 1 year in original, unopened container.

**Storage:** Store in a dry area, between 40°F and 95°F. Protect from direct sunlight.

#### PRECAUTIONS

<u>WARNING!</u> KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP OUT OF REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR PROFESSIONAL USE ONLY BY A QUALIFIED TECHNICIAN.

**Health Precautions:** Component A - IRRITANT - Prolonged skin or eye contact may cause sensitization and irritation. Component B -IRRITANT - Contact with skin or eyes may cause severe burns.

#### First Aid:

**Skin Contact:** Wash thoroughly with soap and water.

**Eye Contact:** Flush immediately with clean water and contact a physician.

**Respiratory Problems:** Remove affected person to fresh air immediately and contact a physician.

**Hygiene:** Wash hands immediately after use. Wash clothing before reuse.

**Spills:** Collect with absorbent material. Remaining material may be removed with a suitable solvent.

**<u>Disposal</u>**: Dispose of in accordance with local, stale and federal regulations.

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

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, by calling 713-896-0123 or toll free at 1-800-732-0166.

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