

Precision Lift® 4.0#

Two-component structural polyurethane foam

Description

Precision Lift 4.0# is a two-component, polyurethane foam used to fill voids, underseal and lift concrete slabs and foundations. This closed-cell, hydro insensitive, high density structural foam can be used for compaction grouting of soil and for filling voids behind pipes, walls, manholes and other structures.

Primary Applications

- Concrete highways
- Airport runways and taxiways
- Railroad track slabs
- Bridge approach slabs
- Concrete slabs (warehouse and industrial floors, garage floors, sidewalks, and patios)
- Concrete pipes
- Unconsolidated soil
- Utility vaults

Advantages

- Quick set time
- Hydro insensitive
- Bonds with soil and concrete
- Develops hydraulic lift to level and stabilize concrete slabs and foundations
- Lower cost alternative vs replacement
- Lighter weight than mudjacking
- Lift can be executed to precise measures
- Precision Lift 4.0 satisfies density and compressive strength retention requirements of NYDOT GTP-9, a Test Procedure for hydro-insensitivity of High Density Polyurethane Grout.

Packaging

- 100 gallon units
- 660 gallon units

Technical information: Physical properties at 73 (23°C) - Liquid

Properties vary by on-site conditions, application method, mixing method, equipment, material temperature & curing conditions.

Solids content: 100%

Viscosity: 270-280 centipoise

Note: Viscosity scale for Prime Resins products: 50 and under= super low, 51-100= very low, 101-400= low, and 401-1000= moderate viscosity.

Physical Properties - Cured	Results	Test Method
Compressive strength	65 psi	ASTM D-1621
Density	4.0 lbs/cubic ft	ASTM D-1622
Tensile strength	100 psi	ASTM D-1623
Shrinkage	Negligible	ASTM D-1042
Closed Cell Content (%)	91.82	ASTM D6226 Method C
Shear Strength (psi)	45.1	ASTM C273
Flexural Strength (psi)	112	ASTM D790

Reaction times	
Cream time	5 seconds
Tack free time	20 – 25 seconds
Rise time	30 - 35 seconds
90% full strength	15 minutes

Confined to the following expansions

Properties will vary depending on application conditions.
Confined foam strength is higher.

3x expansion	1,368 psi
4x expansion	885 psi
5x expansion	573 psi

Accessory Products

- Eco Flush
- Soil probes
- Pumps
- Pipe jack
- Hydraulic proportioner
- Equalizer gun
- Turnkey trailer rig

Directions For Use

Mixing Ratio: A:B 1:1 by volume

Material Preparation: Store material overnight to precondition to 70-80°F (21-27°C) prior to use. Pre-mix the “B” component prior to combining. “B” component contains chemicals that settle over time. Failure to properly pre-mix will result in uncured or improperly cured material. Dispense using a two-component proportioner pump with heated hoses and impingement-style gun. Call Prime Resins for details.

Limitations: Cold temperatures will slow down reaction time and increase viscosity. pH below 3 or above 10 may adversely affect foam properties.

Storage & Clean Up

Storage: Store in dry environment between 40° and 80°F (4-27°C). Shelf Life: 1 year from date of manufacture in unopened containers properly stored. Protect from moisture.

Clean Up: Clean off of skin with soap and water. To clean uncured resin from the gun, flush with acetone. Remove cured material by soaking in Prime Flex CGC (not appropriate for contact with plastic).

Environmental Protection

Cured material is environmentally safe. Dispose of in according to appropriate regulations. Clean up any spilled catalyzed liquid material and add a small amount of water to cure unreacted material.

Shipping

Shipping Class: Motor Freight Class 60

Hazard Classification: Not Hazardous

Health & Safety

Safety: Use OSHA-approved personal protective equipment (PPE), including safety glasses, gloves and confined space equipment/procedures if applicable. Avoid skin contact; do not ingest. See SDS for complete safety precautions. For professional use only .

First Aid

Eye Contact: Immediately flush with large amounts of water.

Seek medical attention. **Inhalation:** Move to fresh air if symptoms occur. If breathing is difficult, seek medical attention. **Ingestion:** Seek medical attention immediately.

Skin Contact: Wipe off contaminated area and wash with soap and water immediately.

Manufacturing

Products are manufactured by Prime Resins, Inc. in the U.S.A. under strict quality assurance practices at our Conyers, GA plant.

Warranty & Disclaimer

Prime Resins, Inc. warrants its products to be free from manufacturing defects and that products meet the published characteristics when tested in accordance with ASTM and Prime Resins standards. No other warranties by Prime Resins, Inc. are expressed or implied, including no warranty of merchantability or fitness for a particular purpose. Prime Resins, Inc. will not be liable for damages of any sort resulting from any claimed breach of warranty. Prime Resins' liability under this warranty is limited to replacement of material or refund of sales price of the material. There are no warranties on any product that has exceeded the “shelf life” or “expiration date” printed on the package label.