

Hydrophilic Polyurethane Grout

DMPU-S-GJ-W-500

Description

DMPU-S-GJ-W-500 is one component high elastic hydrophilic polyurethane designed to form a flexible gasket or plug in joints or cracks in concrete. DMPU-S-GJ-W-500 is a pale yellow, low viscosity liquid, nonflammable liquid. When it comes into contact with water, the grout begins to foam or gel, and depending on the temperature and amount of water present, quickly cures to a flexible, impermeable foam or gel mass unaffected by mildly corrosive environments.

- ✧ High rate of expansion.
- ✧ Adjustable set times
- ✧ Strong adhesion to substrate, high chemical resistances such as drinking water, sea water, waste water and dilute acid & base chemical.
- ✧ DMARGROUT@500 can be pumped at various grout to water ratios
- ✧ Environmental friendly one component PU material, nontoxic and non-chloride.

Application

- ✧ Seal all dry or wet cracks concrete and seal all crack surfaces.
- ✧ Stop leaking.
- ✧ Cracking injection for high water pressure leaking.
- ✧ Stabilization of soil.
- ✧ Potable water tanks and storage
- ✧ Stop leaking rapidly in small working area.

Feature and Benefits

- ✧ Single component.
- ✧ Non-flammable
- ✧ Free foam expansion 10 times its liquid volume.
- ✧ Can mix with any kind of water and mix with water to expand rapidly.
- ✧ Can be injected through remote internal pipe packer equipment

Packing

DMPU-S-GJ-W-500 hydrophilic polyurethane grout is 16kg metal drum sealed under dry nitrogen.

Storage and shelf life

The chemicals should be stored inside warehouse at temperature range 15°C~26°C.

The shelf life is 12 months from date of manufacturing and in original sealed drums.



Performance

Property	Value	Norm
Color	Pale yellow	
Solids	100%	ASTM D 2369 B
Viscosity at 25°C	180-260 mPa.s	ASTM D 2196 A
Density	≥1.00 g/cm ³	ASTM D 3574
Shrinkage	Non-shrink	ASTM D 1042
Toxicity	Non-toxic	

Surface preparation

- Remove surface contaminants and debris to establish the pattern of the crack or joint.
- Drill holes of the correct diameter for the selected packer.
- Drill at an angle of 45°preferably the holes should be drilled staggered around the crack to insure good coverage of the crack in case it is not perpendicular to the concrete surface.
- The depth of the bore should be approximately 1/3~3/2 of the thickness of the concrete.
- Distance between holes can vary by 200 to 300mm, depending on the actual situation.
- Insert the correctly sized packer into the hole up to 2/3 of its length. Tighten with a wrench or spanner by turning clockwise until sufficient tension has been reached to keep the packer in place during injection.

Installation produces

DMPU-S-GJ-W-500 should be pumped with S-812, F-512 or other electric high pressure pump or MG -808 pump. Prior to installation the material should be agitated by vigorously shaking mixing. During injection the grout will follow the path of least resistance. When the material has stopped penetrating, it will continue to expand against the confines of the joint and compress within itself, forming a very dense, closed cell material stopping the leak.

Injectable tubes should be adequately flushed with water prior to the injection of the grout. Pour the desired amount of DMPU-S-GJ-W-500 into a clean pail and pump with airless spray equipment.

Limitation

Low temperatures will significantly increase viscosity. If site temperatures are extremely low, heat bands or warm water baths can be used before and during installation to maintain the products temperature. Allow no water into open containers, as the material is water activated.

Precautions

Always use protective clothing, gloves and goggles consistent with OSHA regulations during use. Avoid eye and skin contact. Do not ingest.

Store all materials and equipment safely and out of reach of children! Observe container labels, MSDS, and instructions in the Product Catalog before using the product and equipment. In case one of the components comes in contact with the skin, wash thoroughly with soap and water. Provide adequate ventilation in volume and pattern in working area. Further protection: emergency showers and eyewash stations.

Following are comparison pictures of our products to other products.
The left one is from DMAR.

Appearance contrast;



add 1 time of hydrogel;



side view picture of gelling after half an hour



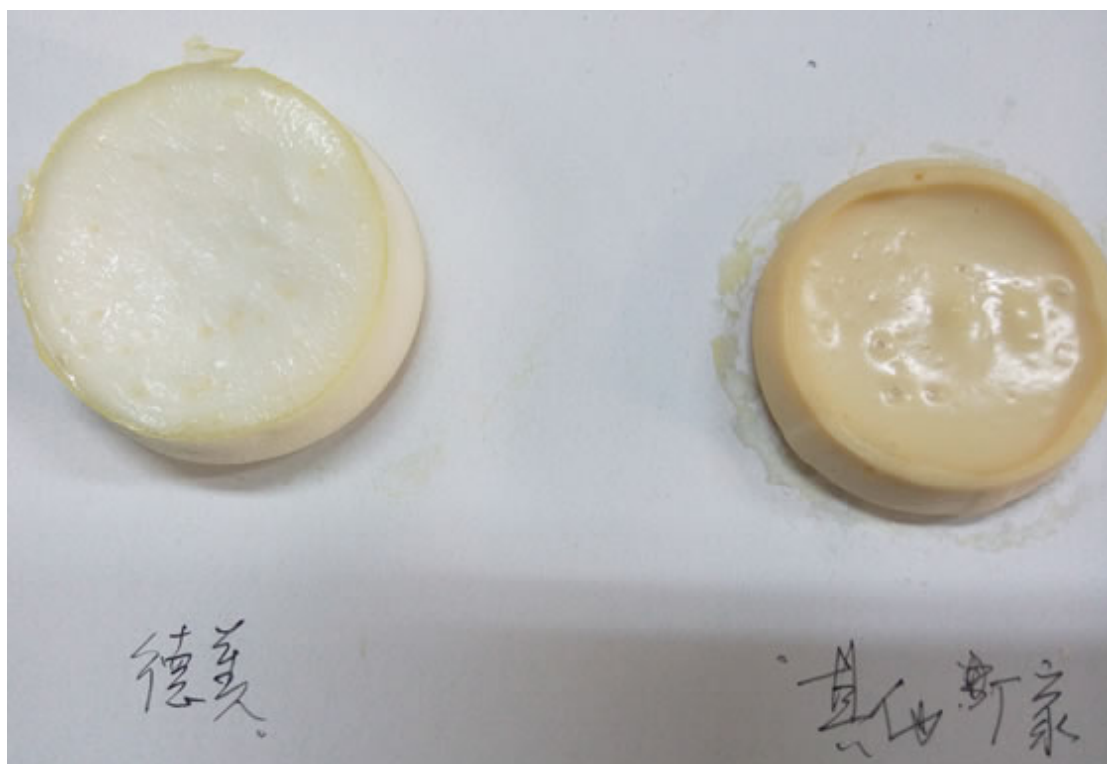
vertical view picture of gelling after half an hour



side view of gelling the second day



vertical view picture of gelling the second day;



side view picture of the fifth day of gelling



vertical view picture of the fifth day of gelling.

