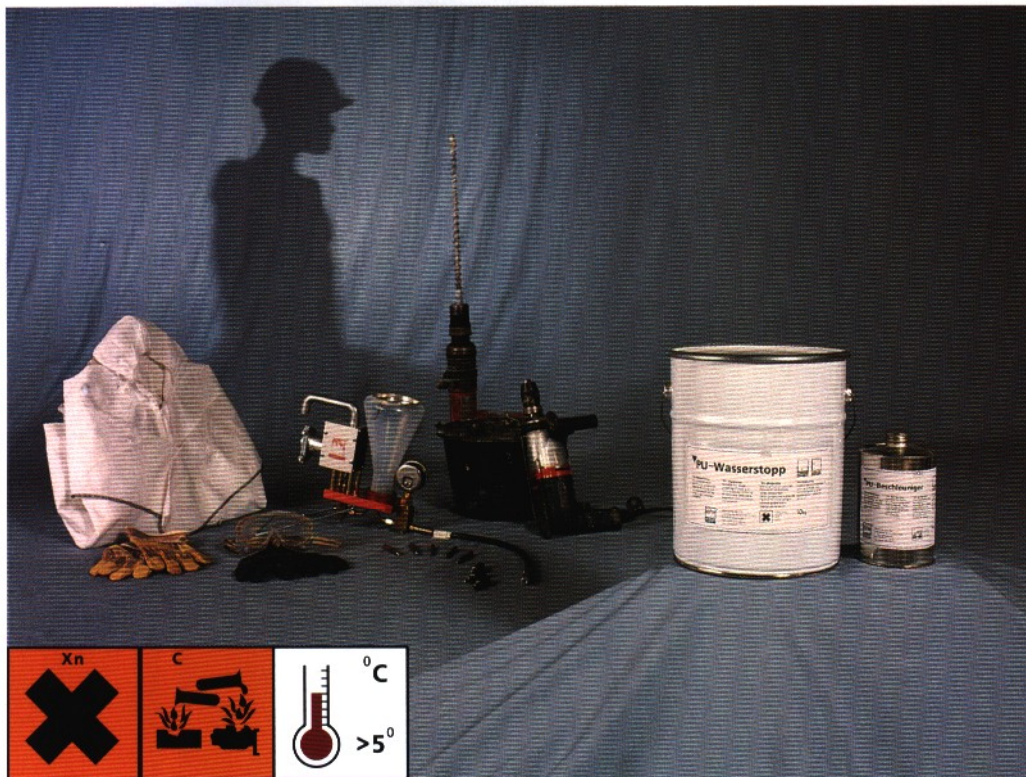


PU-Waterstop PU-Accelerator



harmful

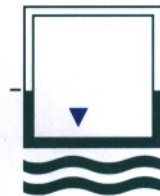
corrosive

PU-Water-stop

PU-Accelerator

Product Description

PU-Waterstop is the "first aid sealant" for cracks containing water, resp. cavities filled with water. The mixture is simply injected into the corresponding cavities, resp. cracks, where it reacts with the water to form a non water-soluble foam. This foam prevents further water from entering resp. flowing out of the cavities, so that the damaged area can subsequently be waterproofed permanently. PU-Waterstop is resistant to seawater and therefore suitable for artificial structures as well. It contains no solvents.



Cellar,
basements
and tanks



Inside walls
and façade



▼**PU-Waterstop and PU-Accelerator** Product Information

Characteristics

Composition

▼PU-Waterstop is made of a modified, solvent-free di-isocyanate pre-polymer (MDI);

▼PU-Accelerator of a tertiary amine.

Features

The semi-liquid injection resin reacts with water to form a non water-soluble foam that increases in volume and thus stops the water flow through the openings. The foam is resistant to seawater.

Strict adherence to the instructions is essential in order to ensure the superb durability of our products.

Areas of Application

▼PU-Waterstop seals cracks and cavities containing water. It is suitable especially for civil engineering resp. underground construction in order to interrupt the flow of water prior to permanent waterproofing treatment.

Combined Applications

▼Powder-X: Cracks that are too wide need to be closed first with ▼Powder-X.

▼Rapid: For retroactive patching of the boreholes.

▼Epoxan-ELH: As a final permanent waterproofing treatment after injection with ▼PU-Waterstop.

Directions for Use

Prior to Application

Get organized: 1 person needs approx. 1.5 hours for each running meter. The ideal working temperature is +20 degrees Celsius; the product can be used, however, starting at +5 degrees Celsius already.

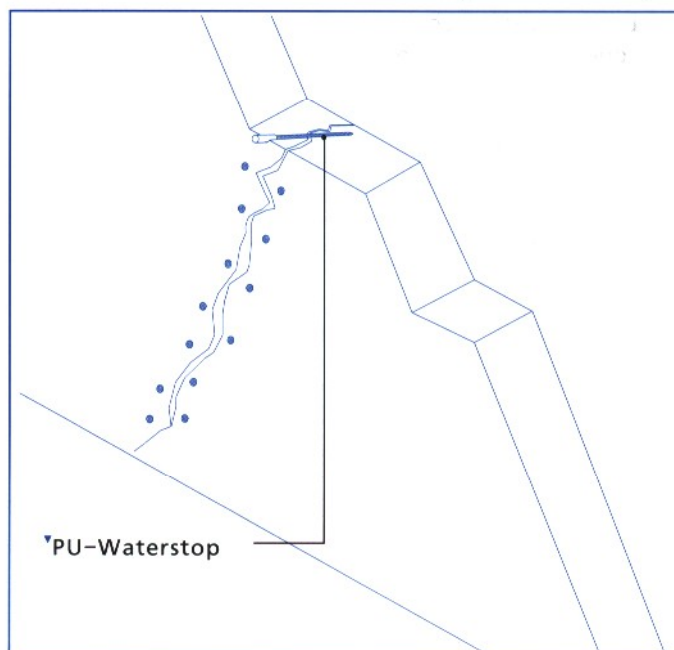
Tools, etc.: Injection pump, packer, boring machine, drill bit (diameter slightly larger than injection packer), mixer, pail. Also: corresponding workwear and gloves. Goggles.

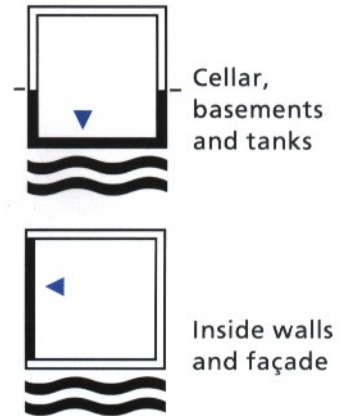
Prepare surface: First, locate the run of the crack resp. of the cavities filled with water. If too much water oozes out (large cracks or high water pressure), seal the cracks with ▼Powder-X.

Handle ▼PU-Waterstop with care. ▼PU-Waterstop is classified as a hazardous material of hazardous material group 6.1, no. 19c; ▼PU-Accelerator is a hazardous material of hazardous material group 8, no. 53b. Therefore, we recommend wearing corresponding workwear, corresponding gloves and goggles. Provide for ample ventilation during application!ist

Caulk cracks first with ▼Powder-X if the water pressure is too high.

Left illustration:
Waterproofing of cracks with ▼PU-Waterstop





Provide for ample ventilation during application.

Working Steps

1. Preparation: Using the mixer, thoroughly blend ▼PU-Waterstop and ▼PU-Accelerator in the pail. The mixing ratio is 10 parts (▼PU-Waterstop) to 1 part (Accelerator) for mixing by volume as well as by weight.
2. Boring holes: In a zigzag pattern, drill holes to the right and left of the crack resp. cavity. The distance should range between 15 and 20 cm, whereby the holes must be drilled through the crack resp. the cavity horizontally as well as vertically. The diameter of the boreholes should be slightly larger than the corresponding injection packers.
3. Injection: After boring, insert injection packers into the boreholes and inject the compound via injection pump. Work from the bottom up. Attach the nipple to the bottom injection packer and keep injecting here until the resin oozes out from the injection packer above. Next, attach the nipple to this injection packer and again keep injecting until the mixture begins to flow from the injection packer above this. Continue with the injection in this fashion to the top. Apply as much pressure as possible during injection (approx. 50 bar).
4. Wait until the material has been foamed and is no longer sticky (depending on the amount of water after 10 - 60 minutes).
5. Using ▼Epoxan-ELH you can then re-press, resp. proceed with the permanent waterproofing treatment (refer to product information ▼Epoxan-ELH).
6. Remove injection packers (e. g. break off) and plug the holes with ▼Rapid.

After Application

Cleaning: Clean tools with ▼Epoxan-Cleaner immediately after use; dried residues can only be removed mechanically (e. g. scraped off). If the injection pump is to be re-used later for injections of ▼PU-Waterstop, the unit can simply be rinsed through with ▼Epoxan-Cleaner after injection; this cleaner can remain in the pump and hoses until the next injection process. If the pump is to be used for injecting other products (e. g. ▼Epoxan-ELH) rinse the unit and hose through thoroughly with the cleaner immediately after injection. Setting: 10 - 60 minutes. It depends on the amount of water contained in the crack resp. cavity.

Packaging, Storage and Disposal

Packaging: ▼PU-Waterstop comes in 10 kg plastic canisters (PE); ▼PU-Accelerator in 1 kg PE plastic bottles.

Shelf life: ▼PU-Waterstop and ▼PU-Accelerator can be stored in their original containers for a period of 1/2 year after delivery without compensating quality (see date of delivery on packing slip). The product must be stored in a dry area at temperatures between +15 and +30 degrees Celsius.

Delivery: Ex works or via our outside warehouses.

Disposal: Liquid material must be disposed of separately via toxid waste collection; once it is dried out it may be disposed of via domestic garbage.

Please refer to the information on the packaging as well.

Any more Questions?

Please direct these to our sales staff or to our Technical Advisory Service in the Wiesmoor plant:
(0 10 49) 49 44 3 02-0

All of the information provided has been compiled to the best of our knowledge. We recommend that the suitability of our products be ascertained prior to application by means of matching the treatment to the individual conditions and testing the product if necessary. Liabilities cannot be derived from this technical information. Our general sales, delivery and payment conditions are valid.

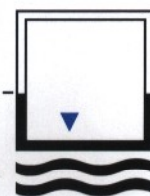


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Product description	
Application	▼PU-Waterstop seals cracks and cavities that cause water leaks. It is especially suitable for civil engineering and underground construction, in order to stop the flow of water until a permanent seal can be made.
Composition	▼PU-Waterstop is made of a modified, solvent free di-isocyanate (MDI-) prepolymer; ▼PU-Accelerator of a tertiary amine.
Features	The semi-liquid injection resin reacts with water to form a non water-soluble foam. The foam increases in volume and thus stops the flow of water through the openings. The foam is resistant to sea water.
Specifications for application	
Setting	10 minutes to 1 hour depending on the amount of water in the crack and the addition of accelerator
Working protection	suitable working clothes, gloves and goggles. Make sure that there is a good flow of air.
Working time	1 person requires approximately 1.5 hrs. per running mtr.
Type of application	packing
Complementary material	▼Epoxan-ELH, ▼Rapid, ▼Powder-X
Warranty	5 years according to Civil Code
No. of persons required	1
Subsequent treatments	unscrew the nipple, push a dowel through, screw on a new nipple repressurize with ▼Epoxan-ELH
Cleaner	▼Epoxan-Cleaner. If the injection pump is to be re-used later to inject ▼PU-Waterstop, the unit can be simply rinsed through with ▼Epoxan-Cleaner after injection; this cleaner can remain in the pump and the hoses until the next injection process. If the pump is to be used for injecting other products (e.g. ▼Exposan-ELH), rinse the unit and hoses through thoroughly with the cleaner immediately after use.
Surface treatment	close large gaps with ▼Powder-X beforehand
Characteristics of surface	cracks must be leaking water
Working temperature	from +5 degrees Celsius. Ideal: +20 degrees Celsius.
Tools	injection pump, packer, boring machine, drill bit, mixer, bucket
Cleaning of tools	with ▼Epoxan-Cleaner or, if hardened, mechanically

▼PU-Waterstop ▼PU-Accelerator

Technical Data Sheet

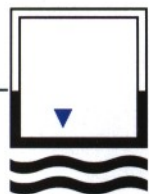


Cellar,
basements
and tanks



Inside walls
and façade

PU-Waterstop PU-Accelerator



Cellar,
basements
and tanks



Inside walls
and façade

Biological/chemical/physical data	
Basis	solvent free di-isocyanate (MDI-) prepolymer
Density	♣PU-Waterstop: 1.23. ♣PU-Accelerator: 0.94.
Hazardous material class	♣PU-Waterstop is harmful; ♣PU-Accelerator is corrosive
Consistency	liquid
Mixing ratio	as necessary
Viscosity	♣PU-Waterstop approximately 300 mPa.s, ♣PU-Accelerator approximately 24 mPa.s, finished mixture approximately 275 mPa.s (all at +20 dgrees Celsius).
Additional material	♣PU-Accelerator
Purchase/order/information	
Contact	Contact our sales staff or our Technical Advisory Service in our Wiessmoor plant: (0 10 49) 49 44 3 02-0.
Item no.	1856 (10kg ♣PU Waterstop) 1857 (1kg ♣PU-Accelerator)
Suppliers	various outside warehouses or direct from the plant
Disposal	Hardened: normal domestic garbage. Liquid: toxic waste.
Packaging	♣PU-Waterstop in 10kg plastic canisters (PE). ♣PU-Accelerator in 1kg PE plastic bottles.
Shelf life	♣PU-Waterstop and ♣PU-Accelerator can be stored for 6 months after delivery in their original packing with no loss in quality (refer to the delivery date on the delivery note). It must be stored in a dry place at a temperature between +15 and +30 degrees Celsius.
Classification for transport	♣PU-Waterstop is classified as hazardous in the group 6.1 no. 19c. ♣PU-Accelerator is classified as hazardous in the group 8 no. 53b.



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