

Reniment[®] UW 11

Underwater Compound
For the Production of Underwater Concrete

Field of application

Reniment[®] UW 11 is applied in order to avoid the segregation of fresh concrete in contact with water. For construction, this underwater concrete may fall through the water in free chute and unprotected.

Reniment[®] UW 11 is specially suitable for:

- structural underwater concrete according to DIN 1045
- concrete chutes in free fall through the water
- concretes for bank stabilisation along canals and rivers
- concreting horizontal layer in groundwater

Properties / effect

Reniment[®] UW 11 causes:

- improved attachment of water to the solids of concrete or mortar
- reduced inner friction between cement and aggregate

In mortar and concrete this effects:

- more homogeneous mixture
- increased inner stability
- no segregation in contact with water (high erosion resistance)
- good flow and self levelling properties
- good density without need of additional compaction

Approval / standards

- complies with EN 934-2 Tab. 4 water retaining admixture

Technical data

Colour and state:	light grey powder
Major active substance:	polyethylene oxide, cellulose ether
Max. dosage:	0,2 – 1,8 % by weight of cement

Processing directions

Reniment[®] UW 11 must not be mixed separately with water.

- Should be added together with water or cement, or last of all
- Mixing period has to be extended by 45 sec with pug mill mixers, or 90 sec with rotary mixers
- Do not use high-energy mixers (turbo-mixer), because the effect will be reduced or obstructed
- Dosage depends on the initial concrete composition and on required resistance in erosion:

In standing water: 3 – 6 kg/m³ concrete

In flowing water: 6 – 10 kg/m³ concrete

In free chute through water: 7 – 9 kg/m³ concrete

For bank stabilisation:

- concreting above water line: 2 – 3 kg/m³

- concreting under water: 3 – 6 kg/m³

- Before application a suitability test according to DIN 1045 is required

Safety and environment	<ul style="list-style-type: none"> • No hazardous substance according to German Regulation on Hazardous Substances • Hazardous material according to German Regulation on Hazardous Materials. • GISCODE BZM 1 WGK 1 (water hazard category; self assessment): slightly hazardous to water • Avoid contact with skin and eyes, as well as inhalation of dust • A safety data sheet is available for this product • Observe directions on containers
Quality control	<ul style="list-style-type: none"> • Reniment® UW 11 is subject to strict implant quality control during production.
Storage / shelf life	<ul style="list-style-type: none"> • Store in a dry place. • minimum shelf life under suitable conditions 1 year
Delivery	<p>Bags: 25 kg 1.000 kg shrink-packed on Euro pallet</p>

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