

## RAPID 3010 / RAPID 4300 Casting Materials for Low and Medium Voltage Cable Joints



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The function of a casting material is to insulate and protect electrical connections in underground cable joints and to prevent water ingress from outside the joint or from within the cable.

RAPID 3010 / RAPID 4300 are two-component, polyurethane-type casting materials. Both materials are hydrophobic, elastic polyurethane resins, meeting the requirements of HD 631.1 S2 and EN 50393. They have excellent insulation properties and are well suited for all cable jointing systems.

### What is RAPID 3010 / RAPID 4300 made of?

RAPID systems are polyurethane resins. They consist of part A - a mixture of polyols, fillers and special additives - and part B - the hardener - which is MDI (diphenylmethanediisocyanate). The isocyanate is classified as a hazardous material and is labelled "harmful" in accordance with European regulations.

#### How is RAPID 3010 / RAPID 4300 used?

Preparation of RAPID systems starts immediately before the casting process. The two components are mixed either in a double chamber bag or in a can to start the cross-linking process.

## Why is RAPID 3010 / RAPID 4300 unique?

Their outstanding properties include excellent hydrolytic stability and most impressive hydrophobic characteristics. Foaming problems during curing are avoided, even in a relatively high humidity environment. This ensures long-term stability under service conditions. Furthermore, RAPID systems have an excellent curing profile at various temperatures, which allows easy handling and curing, summer and winter alike.

Permanent elasticity ensures longterm stability and accommodation of cable movement. As a result of the cross-linking reaction, the resin bonds strongly to functional parts, preventing the creation of voids between hardened resin and cable insulation.

#### Where is RAPID 3010 / RAPID 4300 used?

RAPID 3010 is suited for use in all low and medium voltage cable joint systems (classification according HD 631.1 S2: LMP/LI-W; MMP/MI-W). RAPID 4300 is suited for all low voltage cable joint systems and for medium voltage systems where mechanical protection and protection against water ingress is required (classification according HD 631.1 S2: LMP/LI-W; MMP-W).



#### **RAPID 3010 RAPID 4300 Technical data** Туре Polyurethane Polyurethane Colour beige blue 24 months Shelf life 24 months Reaction temperature 60 °C 80 °C Gel time @ 23 °C 13 mins 15 mins Storage temperature 5 °C minimum/40 °C maximum 5 °C minimum/40 °C maximum Hardness 30 Shore D 44 Shore D Tensile strength 4 MPa 8 MPa 30 % 45 % Elongation at break

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