



TRS HARDENER 1000 E COLD VULCANIZING HARDENER Free of chlorinated solvents

The **TRS HARDENER 1000 E** is a CFC's free hardener specially designed to be use with the TRS' cold vulcanizing cements when a non-flammable product is not required.

Because of crosslinking process on the adhesives, a change in the crystallization properties of them takes place, which mainly results in an improvement in the resistance to temperature, an increment on strength resistance and a reduction of setting time.

Scope

TRS HARDENER 1000 E is the hardener for the two-component cold vulcanizing adhesives made by TRS. It is designed to work with rubber or polyurethane based adhesives in rubber or plastic conveyor belt systems.

TRS HARDENER 1000 E can be used with hydroxyl - polyurethane, polychloroprene, natural and synthetic rubber adhesives as a crosslinking agent. As TRS Hardener 1000 E largely does not affect the colour of the adhesive film even when exposed to light, it is also suitable for the bonding of bright coloured footwear.

Physical Properties

Basis	MDI
Solvent System	Ketone Solvents. Free of CFC's
Colours	From yellowish to light brown
Brookfield Viscosity RVT (Sp1, 20 rpm, 20°C) – UNE 12092	14 mPa·s
Kinematic Viscosity 20°	20 cSt
%NCO	9 ± 0,2
Flash Point	Approx. -4°C DIN 51755 (method: closed cup)
Shelf life	At least 24 months at room temperature

Application

1.- Two-component adhesives

After the addition of **TRS Hardener 1000 E**, the two-part adhesive should be used within a certain time, "pot life", which is determined not only by its rubber or polyurethane content, but also by its other components (resins, antioxidants, solvents, etc.). At the expiration of the pot life the adhesive is more difficult to process, and its viscosity increases rapidly. Finally, it becomes a gel.

It is important to assure the perfect blend between the glue and the hardener stirring with a non-metallic stirrer for at least two minutes.

2.- Dosage Guidelines

For cross-linking of 100 parts by weight of adhesive

Natural Rubber	4-6 parts by weight TRS Hardener 1000 E
Polychloroprene	6-8 parts by weight TRS Hardener 1000 E
Nitrile	6-8 parts by weight TRS Hardener 1000 E
Polyurethane	3-5 parts by weight TRS Hardener 1000 E

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Storage

Shelf life of unopened containers is 2 years after production date when stored under conditions according DIN 7716.

Safety



TRS HARDENER 1000 E contains hazardous ingredients: ethyl acetate; 4,4'-methylenediphenyl diisocyanate, diphenylmethane-4,4'-diisocyanate; 4isocyanatosulphonyltoluene, tosyl isocyanate; Diphenylmethane Diisocyanate, isomers and homologues. It is classified under CLP regulation.

For safety instructions for transport, manipulation or storage please read and understand the Material Safety Data Sheet.

Packaging sizes

TRS HARDENER 1000 E

TRS code	Description	Pieces/carton	Quantity/Palet
700510	TRS HARDENER 1000 E 30 g	10 bottles	720 cartons - 7290 units
700511	TRS HARDENER 1000 E 150 g	6 bottles	180 cartons – 648 units
700512	TRS HARDENER 1000 E 235 g	12 bottles	54 cartons – 648 units
700513	TRS HARDENER 1000 E 700 g	6 bottles	60 cartons – 360 units

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Application use and processing of the products are beyond our control and, therefore, entirely your own responsibility. If, despite this, liability should be established for any damage, it will be limited to the value of the goods delivered by us and used by you. We will, of course, provide products of consistent quality within the scope of our General Conditions of Sale and Delivery.