



The TRS 4004 cold-vulcanizing adhesive is TRS' system for cold splicing and repairing rubber conveyor belts when a non-flammable product is not required. By using TRS 4004 with TRS 1000 E or TRS TRISO hardeners you can also work in all areas where wear and corrosion protection are needed.

SCOPE

TRS 4004 is a two-component cold vulcanizing adhesive based on polychloroprene rubber (CR) specially designed to bond rubber to rubber, rubber to fabric, rubber to metal, fabric to fabric or metal to fabric in areas that a non-flammable product is not required.

A very important field of application is belt repairing with TRS Diamond Repair Patches and TRS Repair Strips.

PHYSICAL PROPERTIES

Basis	Polychloroprene rubber (CR)	Thermal stability - UNE EN 12964	→ Max. 70°C constant
Solvent System	Ethyl Acetate, Cyclohexane	Open Time UNE EN 14022 met 4 - Temp. (15-30°C)	→ 15 - 20 minutes
Colours	Dark Grey, White	Open Time UNE EN 14022 met 4 - Temp. (+30°C)	▶ 8 - 12 minutes
Brookfield Viscosity RVT (Sp4, 20 rpm, 20°C) UNE 12092	→ 3200 ± 500 mPa·s	Peel Strength Rubber / Rubber 24h	→ 129 N/cm
Kinematic Viscosity	→ 3500 ± 550 cSt	Peel Strength Rubber / Rubber 48h	→ 130 N/cm
Flash Point	→ app10°C	Pot Life (3% Hardener TRS 1000 E) UNE EN 14022 MET 3	→ Approx. 2 hours at 20°C
Oil Resistance	Excellent	Coverage	→ 680 g/m² with 2 layers or
Application Temperature	+10°C to +40°C		340 g/m² per layer
Environmental and Materials Temperature	+5°C to 45°C (minimum 5° above the dew point)	Shelf life	At least 24 months after production date

MIXING INSTRUCTIONS

It is normal that TRS 4004 has a little of sedimentation at the bottom of the can or drum. If so, to be sure that you do not lose this critical component, it is recommend to stir it with the aid of a non-metal and non-round stirrer made of wood or plastic before adding the hardener for at least 2 minutes. Please do not scrape off the spatula that you use to inspect the bottom of the can on the edge of the can losing this material.

Once there is an homogeneous adhesive, usually around 2 minutes stirring, the hardener can be added. It is recommended our **TRS Hardener 1000 E** (3 - 5% in weight = 20:1) and stir for at least 2 minutes more.

STORAGE

Shelf life of unopened containers is 2 years after production date when stored under conditions according DIN 7716. Temperatures below 5 °C can cause a reversible change in the structure of the rubber compound, increasing the viscosity of the glue that can jellify. It is not possible to use the glue under these conditions because the adhesive is so thick that it cannot wet the surfaces to bond. If the cement arrives to this point, the solution is to put the containers at room temperature and let them time to recover, without trying to heat or stir it.

SAFETY







TRS 4004 contains hazardous ingredients: ethyl acetate; hydrocarbons: C7, n-alkanes, isoalkanes, cyclics; rosin colophony. 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 code	Description	Pieces/carton	Quantity/Palet
302900	TRS 4004 - 750 ml	10 cans	49 cartons - 490 units
302910	TRS 4004 - 4,7 Kg	4 cans	27 cartons - 108 units
302910	TRS 4004 - 200 L/190 Kg	1 drum	2 drums

TRS code	Description	Pieces/carton	Quantity/Palet
302600	TRS 4004 - 750 ml WHITE	10 cans	49 cartons - 490 units









APPLICATION

CONDITIONING THE MATERIALS:

Before working on the materials, be sure that you have all of them within the correct temperature and humidity application conditions. If possible, leave materials in the work area to ensure this the day before.

Pay special attention to humidity, it should not exceed 80%, and the temperature of the substrate that should be at least 5°C above the dew point to avoid surface condensation of water.

SURFACE PREPARATION:

In general, the surfaces to be bonded must be clean, dry, and free of oil, paint, or other kind of contamination. If not, the surfaces must first be cleaned with TRS Cleaning Solvent MEK.

Rubber without bonding layer:

Buff the surface of the rubber with a grinder. The rougher the surface, the better the adhesion. Pay attention to not scorch the rubber. Scorched rubber cannot be glued.

Use only slow running angle grinders for buffing rubber and very rough buffing discs (ex. Silicium carbide - P24). The rougher the buffed surface the larger the surface you are coating with **TRS 4004** and, therefore, the better the final adhesion.

Once the surface is polished, remove dust in dry avoiding the application of any kind of solvent after polishing.

Rubber with bonding layer:

Fresh bonding layer: Wash the surface with TRS Cleaning Solvent MEK and let it dry.

Dry bonding layer: Prepare the surface as if it had not bonding layer.

Metal:

Make sure the metallic surface is degreased and free from any contamination. If not, wash the surface with **TRS Cleaning Solvent MEK** and let it dry. Buff the surface of the metal using an angle grinder with rough buffing disc (ex. Ceramic - P24). Remove all dust dry.

Fabric:

In this case it depends on each fabric (treatment, weight and weave) but, in general, clean and let it dry.

APPLICATION:

It is strongly recommended to always apply two layers of the product on each surface. The first coat acts as a primer, so it is important to wait until it is totally dry before applying the second coat.

In case of metallic surfaces, it is recommended to apply as a first layer **TRS Metal Primer**. It is proven that the application of **TRS Metal Primer** can improve the resistance and the reliability of the bonding.

It is always important to wait at least 1 hour (20°C) before applying the second layer. If possible, it is recommended to apply the first layer the day before.

Apply the product with the help of a brush or a nap roller. It is important to apply a thin and even layer. The scrub-like motion when working with a brush can help us ensure this by avoiding leaving air in the polished surface voids.

The second layer is always glue (also in metal). Apply a uniform and thin layer of glue with the help of a brush. As it has been done the same treatment to both surfaces, drying process will be uniform.

After around 10 minutes, the surfaces are dry to a tack and ready to bond (check it with the back of the hand). Join surfaces and, with a hand-held roller, roll from the centre to the edges applying pression to bond surfaces together. Working this way eliminates the air avoiding the formation of bubbles on the joint.

Our technical advice - whether verbal, in writing or by the way of trials - is given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. It does not release you from the obliqation to test the products supplied by us as to their suitability for the intended processes and uses

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.



