

## TECHNICAL DATA SHEET

### CHEMITAC 42

#### DESCRIPTION:

Chemitac 42 is a thermoreactive adhesive used with primer Chemitac 11, for bonding elastomers as NR, SBR, BR, CR, NBR, HNBR, IIR, CIIR, BIIR, CSM and EPDM with steel, aluminum, aramid, textile fibers and glass by vulcanization process.

In bonding applications for textile fibers with pretreatment RFL (Resorcinol, Formaldehyde, and Latex), Chemitac 42 is applied without primer.

The textile fibers can be: Cotton, cellulose, polyamide, polyester, and aramid.

Chemitac 42 is a heavy metals free product.

#### TYPICAL PHYSICAL CHARACTERISTICS:

Appearance	:	Black liquid.
Non-volatile solids (1h @ 135°C)	:	17,00 - 21,00%
Specific gravity at 25°C	:	1,200 – 1,270 g/cm <sup>3</sup>
Viscosity Brookfield at 25°C	:	200 - 600cps - #2 spindle @ 30 rpm.
Viscosity Ford Cup # 4 at 25°C	:	60 - 110 s.
Diluents	:	Xylene/Toluene/Trichloro or Perchloroethylene
Bonding Temperature Range	:	130 to 200°C
Shelf life	:	1 year (closed can below 25°C).

#### CHEMICAL COMPOSITION:

Polymers and fillers stabilized in aromatic or chlorinated solvents.

#### HOW TO PREPARE THE SURFACE:

##### METALS AND RIGID SUBSTRATES:

Prepare the metal surface properly by completely removing oil, grease, and dirt.

Blasting the surface with grit blasting steel so that the surface roughness is greater than 15 µm.

For aluminum surfaces we recommend the use of aluminum oxide as abrasive.

Clean again the substrate to remove dust from blasting residues.

If specified, the metal part can be phosphatized, galvanized, chromate conversion treated or KTL, before applying adhesive.

## TEXTILE FIBERS

In application with textile fibers treated with RFL, Chemitac 42 is applied directly to the fiber.

When the natural fibers are without treatment with RFL, the application of Chemitac 50 or Chemitac 94 is recommended before Chemitac 42.

## HOW TO APPLY CHEMITAC:

**Agitation:** We recommend stirring Chemitac 42 before the application to avoid settling.

**Dilution:** Dilution of the product depends on the applications methods.  
We recommend that dilution is always made with Xylene, Toluene, Trichloro or Perchloroethylene.

**Dipping:** For this application, we recommend diluting between 20 e 50% v/v.

**Brushing:** For this application, we recommend diluting between 20 e 50% v/v.

**Spray:** For this application, we recommend diluting between 50 and 100% v/v.

**Application Layer:** In applications with rigid substrate apply primer Chemitac 11 prior to the Chemitac 42 adhesive.

The primer layer thickness must be between 3 and 8  $\mu\text{m}$ .

After drying the primer, apply Chemitac 42 where its layer thickness must be between 15 and 25  $\mu\text{m}$ .

In applications where Chemitac 42 will be used as mono component, the layer thickness must be between 20 and 25  $\mu\text{m}$ .

Parts with Chemitac 42 already applied can be stored for 60 days before vulcanization if stored in a dust and moisture free condition.

**Drying:** Dry the film between 10 and 30 minutes at room temperature. If it is necessary to reduce drying time, we recommend using forced air for 2 minutes at 65°C maximum. Do not use in this stage of process temperatures above 82°C to avoid adhesive pre-cure.

After this process, proceed to vulcanization.

## TOXICITY:

Breathing vapors for a prolonged period of time is harmful to health.

Use Chemitac 42 only with facial breathing mask, gloves, protective goggles, and appropriate ventilation.

Continuous contact with the skin may cause irritation.

Adhesive Chemitac 42 may be fatal if swallowed.

If swallowed, do not induce vomiting, but call a physician.

## **STORAGE:**

Keep container tightly closed during storage and always keep away from heat sources. Maximum temperature storage: 25°C. Storage in an environment below 10°C increases the shelf life of the adhesive.

## **PACKING:**

The following packaging is available:

- Gallon
- Pail
- Drum

## **SAFETY INFORMATION:**

Consult the product MSDS for safety information.

## **ADDITIONAL INFORMATION:**

For more information on this and other products, please visit our Website:

[www.chemitac.com](http://www.chemitac.com)