

CHEMITAC 111

DESCRIPTION

Chemitac 111 is a versatile thermoreactive adhesive that can be used as a primer under other Chemitac covercoat adhesive for bonding NR, SBR, BR, CR, NBR, HNBR, IIR, CIIR, BIIR, CSM and EPDM or as a one-coat adhesive for bonding NBR, ACM and solid PU to rigid substrates.

Chemitac 111 is a lead-free product.

TYPICAL PROPERTIES

Appearance	Gray liquid
Nonvolatile solids content (1h @ 105°C)	23-27%
Specific gravity @ 25°C	0.920-0.960 g/cm ³
Viscosity, Brookfield @ 25°C	80-350 cps - Spindle 2, 30 rpm
Viscosity, Ford Cup No.4 @ 25°C	21-32 s
Solvents	MEK/MIBK
Bonding Temperature Range	130-200°C
Shelf life	1 year (unopened container below 25°C)

CHEMICAL COMPOSITION

Polymers and fillers stabilized in aromatic and ketone solvents.

SURFACE PREPARATION

Surface preparation comprises two steps:

1. **Cleaning** – Solvent degreasing or alkaline cleaning methods should be used to remove oils, greases and dirt. Cleaning solutions should be kept free from contamination and replaced when necessary.

2. **Surface treatment** – In order to achieve good adhesion results, the surface must be either mechanically or chemically treated before the application of the adhesive.
- Chemical treatment – Phosphatizing, anodizing and KTL coatings are the most used methods.
 - Mechanical treatment – We recommend grit blasting the surface to a roughness (Rz) greater than 15 microns. Steel grit should be used for ferrous metals such as steel and iron; for other nonferrous metals, the use of aluminum oxide is recommended. Care should be taken to maintain grits clean. Blasting residues should be removed before the application of the adhesive. Layover time between blasting and adhesive application should be kept to a minimum in order to avoid oxidation.

ADHESIVE APPLICATION

Agitation – We recommend stirring Chemitac 111 before the application to avoid settling.

Dilution – We recommend the dilution be always made with MEK or MIBK. Dilution of the product depends upon the type of application.

- **Dip** – 50-100% v/v.
- **Brush/Roll** – 20-50% v/v.
- **Spray** – 50-100% v/v.

Application Layer – The film obtained by applying Chemitac 111 is thin and gray. The layer thickness should be 5-10 microns.

Drying – Drying time is usually 30-45 minutes at room temperature. If it is necessary to reduce drying time, we recommend using circulating air at 70°C for 15 minutes maximum. Check the purity of drying air to avoid contamination. The adhesive film should be completely dry before the application of the covercoat adhesive and/or vulcanization.

The application layer and drying time values are to be used as reference. They may deviate based on processing conditions. For more details and guidance, please contact us at tech.support@chemitac.com.

Layover time – Coated parts can be stored for 30 days before vulcanization in a clean and moisture-free condition.

CAUTIONARY INFORMATION

Before using this product, please refer to the Safety Data Sheet for safe use and handling instructions.

STORAGE

Keep the container tightly closed and away from heat sources. Maximum temperature storage is 25°C.

ADDITIONAL INFORMATION

For more information on this and other products, please contact us:

tech.support@chemitac.com