

# **TECHNICAL DATA SHEET**

# SK2TR450-12

Semi-permanent mould release agent

#### DESCRIPTION

Release agent SK2TR450-12 is a very fast-evaporating semi-permanent mould release agent used in the processing of thermoset resins. It is easy to handle and adheres excellent to the mould's surface (no transfer to the moulded parts), thereby rendering downstream processing, such as gluing or vanishing, possible without further treatments to the casting. Release agent SK2TR450-12 creates high gloss finished surfaces and minimizes release agent residues in the mould. The product designated application fields include the processing of thermoset resins, polyester, epoxy as well as phenolic resins.

This product is used in various manufacturing processes of parts made of composite materials.

#### ► APPLICATION

Cleaning process:

Prior to the first application of release agent SK2TR450-12, ensure to thoroughly clean the moulds from dirt and former release agent residues. We recommend using the cleaner of the category SK2TR. Proceed to clean the moulds at room temperature with a fast-evaporating solvent to eliminate all residues of grease and wax.

#### Base Coating:

Apply Release Agent SK2TR450-12 by using a soaked, yet not dripping wet clean lint-free cotton cloth. Start by applying the release agent to a small surface area of approx. 1 m<sup>2</sup>, letting the film dry completely (wipe on, leave on). We suggest beginning to wipe along the outer border, approaching the inside. Repeat this procedure with the adjacent areas until all parts of the mould are evenly coated. To complete the whole coating process, follow these guidelines and apply 3 - 4 layers of release agent SK2TR450-12 to the mould. Allow each layer to cure for about 10 minutes. After the last layer has been applied, allow the release agent to cure for about 40 - 60 minutes.

#### Mould touch-up:

The first release film refreshment should be performed after about 5 - 6 releases, in order to prepare the mould for a high number of release cycles. Since the release film wears during running production, touch-up coatings should be applied frequently. Release Agent SK2TR450-12 has been designed to incorporate and chemically bond touch-up layers of itself. Hence, curing time after touch-up reduces to approx. 10 min at room temperature. The appropriate frequency of touch-ups required for constant high release performance depends on individual production conditions and has to be determined in on-site trials. We highly recommend to apply the touch-up prior to an observed decrease in release efficiency as this will significantly reduce mould fouling and maintain a constant high quality of the moulded parts.



Although Release Agent SK2TR450-12 can be touched-up partially, we recommend touchup of the complete mould.

Partial release film repairs:

Occasionally, a partial, drastic decrease in release performance might occur, requiring partial repair of the releasing film. Prior to repairing the release film of a particular area of the mould, the worn release film needs to be removed completely 10 cm around the affected area. Semi-permanent release agents require soft abrasion as well as a wiping with solvent. Poor cleanings drastically impair the release film adhesion on the affected areas. Treat these cleaned areas as if they were a new mould (see Base coat). Continue by refreshing the film after each release for the first 4-6 demoulding cycles after the repair. Keep in mind, that the repaired areas are more damageable than others.

### ► TECHNICAL DATA

Appearance: Composition: Density [g/cm<sup>3</sup>]: Flashpoint: Colourless liquid Resin mixture in solvents Approx. 0.7 0°C

#### SIZE

Packaging	
Box of 15 Cans x 1 L (0,70 kg)	
Set of 4 Cans of 5 L	

## STORAGE

This product should be stored in tightly sealed containers and has to be protected from frost, heat and direct sunlight. If these rules are obeyed, the product can be stored for at least 24 months.