



# TECHNICAL DATA SHEET

## SK2TR450-6

### Semi-permanent mould release agent

#### ► DESCRIPTION

SK2TR450-6 is a fast evaporating semi-permanent mould release agent for the processing of thermoset resins. By using release agent SK2TR450-6, sealing the mould is no longer necessary. The product shows excellent adhesion to the mould's surface, thereby allowing for post-processing of moulded parts without the need for any further treatments. Moulded parts exhibit a high gloss surface finish. Release agent SK2TR450-6 is temperature-stable up to 450 °C. Application is usually done at 10-80 °C. It is a multi-purpose product used in the processing of thermoset resins, polyester, epoxy and phenolic resins. As release agent SK2TR450-6 dispenses without the need for any mould sealing, the product allows for significant time savings in mould preparation.

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

#### ► APPLICATION

Cleaning process:

Mould surfaces should be thoroughly cleaned prior to the application of release agent SK2TR450-6. We recommend using our cleaner SK2TR000-2 to do so. Additional cleaning using a fast-evaporating solvent is also recommended to ensure all residues of fat and wax are eliminated.

Base Coating:

Release agent SK2TR450-6 can directly be applied to the mould, application of any mould sealer is not required. Use a soaked, yet not dripping wet clean lint-free cotton cloth to apply release agent SK2TR450-6 to a small surface area of about 1 m<sup>2</sup>. After approx. 10–15 s, when the film is still moist, use a second, clean and dry cloth to absorb excess of release agent SK2TR450-6 and proceed by wiping in circular motion until a clear and dry film emerges. Beginning to wipe along the outer border of the mould approaching the inside is recommended. This procedure is repeated with the adjacent areas until all parts of the mould have been treated. We recommend application of a minimum of 2 layers of release agent SK2TR450-6 to ensure smooth and homogenous grounding. Make sure that the solvent is evaporated completely between each application. After application of the final layer, release agent SK2TR450-6 should be allowed to cure for about 30–60 min. Curing time can be reduced by increasing the mould's temperature (approx. 50°C, 15-30 min.).

Mould touch-up:

Good conditioning of the mould will be achieved if the release agent film is refreshed 5-6 demoulding cycles after the initial base coating process. The release film wears during



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production. Hence, touch-up coatings should be applied frequently, considering a curing time of approx. 10 min at room temperature after each touch-up. The appropriate frequency of touchups required for sufficient release 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 lead to extended mould service lives while maintaining a constant high quality of the moulded parts. Release agent SK2TR450-6 can also be touched-up partially, refreshing the release agent film only on those mould areas experiencing higher wear. Touch-up of the complete mould is preferred, though.

#### Partial release film repairs:

Occasionally, a partial, drastic decrease in release performance might occur, requiring partial repair of the releasing film. Prior to doing so, the worn release film has to be removed completely 10 cm around the affected area with the help of soft abrasion, accompanied by wiping with solvent. Ensure that the mould's surface is thoroughly cleaned prior to application of a fresh base coat in the respective area in order to guarantee sufficient adhesion of the compensating layer to the mould.

Grounding is done as described above (Base coat). The repaired area should be touched-up after each release for the first 4-6 demoulding cycles after the repair in order to maintain best overall release performance.

#### ► TECHNICAL DATA

Appearance:	Colourless liquid
Composition:	Resin mixture in solvent
Density [g/cm <sup>3</sup> ]:	Approx. 0.8
Max. used T:	450°C
Flashpoint:	0°C

#### ► SIZE

Packaging
Box of 15 Cans x 1 L
Can 5 L

#### ► STORAGE

The 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.