



# TECHNICAL DATA SHEET

## SK2TR400-3

### Semi-permanent mould release agent

#### ► DESCRIPTION

SK2TR400-3 is a fast-evaporating solvent-based semi-permanent mould release agent used for processing composites that features similar characteristics as our semi-permanent mould release SK2TR400-2. The versatile product provides excellent lubrication and release for smooth processing and a high-gloss surface finish. After cure, the release film is temperature stable up to 400°C / 752°F. However, the recommended application temperature ranges from 10 to 60°C (50 – 140°F). Release agent SK2TR400-3 does not transfer to the moulded parts, thereby allowing for post-processing, such as varnishing etc., without additional preparation. A build-up of release agent in the mould is highly unlikely if the product is used as directed.

Release agent SK2TR400-3 is universally applicable for processing epoxy resins (thermosets and prepregs), polyester and phenolic resins as well as thermoplastic composites.

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

#### ► APPLICATION

Please note that Release agent SK2TR400-3 is a solvent-based product and hence should only be used in well-ventilated areas. Keep the container tightly closed during storage since the product reacts with moisture.

Mould cleaning:

Prior to the first application of Release agent SK2TR400-3 thoroughly clean the moulds. We recommend to use one of our SK2TR cleaners for this purpose. In case of larger deposits of resins you can also use a soft abrasive.

Mould sealing:

Release agent SK2TR400-3 usually does not require separate mould sealing. However, when using porous, or freshly repaired moulds, treating the mould with an adequate mould sealer from our range is recommended in order to achieve best release performance.

Base coat:

Release agent SK2TR400-3 can be applied by means of spraying, brushing or wiping. For spray application, we recommend to use dry air or an airless spray gun. It is recommended to apply Release agent SK2TR400-3 with the help of a soaked, yet not dripping clean lint-free cloth. Wipe the wet cloth over a mould surface covering an area of approx. 1 m<sup>2</sup> - evenly apply a thin continuous layer of Release agent SK2TR400-3. Take care not to wipe or spray over the treated mould area before the applied film has been dried completely. Continue by treating the adjacent mould areas in the same manner, frequently re-applying the product to the cloth. Special care should be taken to the overlap areas. Repeat this procedure until all parts of the mould are evenly coated.



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We suggest wiping along the outer border first, approaching the inside. To ensure that the complete mould surface has been homogeneously treated we recommend to apply a total of at least 2 layers of release agent SK2TR400-3. Please note that the solvent has to evaporate completely and each layer should be cured 5-10 min prior to application of the consecutive layer. The resulting release film should be dry and not sticky.

Please further note that spray application may lead to a matt surface finish. In this case, the dry surface can be polished with the help of a clean cotton rag to enhance the gloss.

In order to guarantee best release performance of SK2TR400-3, new moulds made of glass fiber or epoxy need to be fully cured prior to starting production.

When employing closed moulds make sure that all solvent has been evaporated completely before starting production. If necessary, use oil-free compressed air to dry the mould surface.

#### Mould touch-up:

When starting production, the release film should be touched-up after 5-6 demouldings to achieve best performance. During running production, the release film wears and hence has to be refreshed frequently. We highly recommend to perform the touch-up prior to a drastic decrease in release performance to guarantee a constant high product quality and keep mould build-up low. The appropriate frequency for touch-ups depends on the individual production conditions and has to be determined in on-site trials. For touch-up, applying one single layer of Release agent SK2TR400-3 considering the curing time will be sufficient.

Release agent SK2TR400-3 has been designed to chemically bond and integrate consecutively applied layers of itself, thereby allowing for partial touch-ups. However, we recommend refreshing the complete release film.

#### Partial release film repair:

Occasionally, a partial, drastic decrease in release performance might occur, requiring partial repair of the release film. In this case, remove the worn release film completely 10 cm around the affected area with the help of soft abrasion and wiping with solvent. Note that poor cleanings drastically impair the release film adhesion on the affected areas. Treat the cleaned areas as if they were new (cf. Base coat). Continue by refreshing the film after each demoulding for the first 4-6 releases after the repair. Keep in mind, that the repaired areas are more damageable than others.

### ► TECHNICAL DATA

Appearance:	Colourless liquid
Composition:	Resin mixture in solvents
Density [g/cm <sup>3</sup> ]:	Approx. 0.72
Flashpoint:	7°C



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#### ► SIZE

Packaging
Box of 15 Cans x 1 L (0,72 kg)
Can 5 L (3,6 kg)

#### ► 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.