

**DESCRIPTION**

SK2TR450-16 is an ultra-fast evaporating, multi-purpose semi-permanent mould release agent that is used to release most thermosetting resins from gelcoated and non-gelcoated mould materials. The product is especially easy and fast to apply (wipe on, leave on) and does not require the additional use of any mould sealer. After cure, the release film is temperature stable up to 450°C, however the product is most commonly applied at temperatures in the range 10-80°C. The moulded parts exhibit a high gloss surface finish and are not contaminated, hence allowing for direct varnishing or gluing without further treatments. SK2TR450-16 has been adjusted with regard to different lubrication properties. All our SK2TR release agents are compatible with each other.

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

**APPLICATION**

Release agent SK2TR450-16 is versatile in application and can universally be used to release thermosetting resins, such as polyester, vinyl ester, epoxy and phenolic resins from all kind of mould materials. The product is also perfectly suited for many other moulding processes where a room/low temperature below 60°C application is possible. Note that the product is not suited to release isocyanate containing resins and silicone elastomers.

Please, make sure that the release agent SK2TR450-16 should only be handled in well-ventilated areas.

Mould cleaning:

Make sure that the mould has been thoroughly cleaned from residues of wax and silicone with the help of a solvent-based cleaner from our category SK2TR. The release agent SK2TR450-16 has been adjusted in formulation to allow application over existing semi-permanent release agents without a further cleaning step. However, ensure that the mould is clean and dry.

Base coating:

When SK2TR450-16 is used in production, there is no need for an additional mould sealer, even when using porous mould surfaces. Application is done 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. 0.5 m<sup>2</sup> - do not rub or polish afterwards. 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.

We suggest wiping along the outer border first, approaching the inside. When dry, allow a further 10-15 min before applying the consecutive release film layer. In total, 2-3 layers of the release agent SK2TR450-16 should be applied to the mould surface. In case of new, porous or freshly repaired moulds apply an extra 1-2 coating layers as described above. After the final layer has been applied, allow the film to cure for at least 30 min at room temperature before moulding. Note that longer curing times or curing at elevated temperatures (e. g. 5 min at 60°C) will result in an improved release film durability.

Mould touch-up:

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 SK2TR450-16 considering the curing time will be sufficient. Our release agent SK2TR450-16 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 repairs:

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 (see the section 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	VALUE
Appearance:	Colourless liquid
Composition:	Resin mixture in solvents
Density [g/cm3]:	Approx. 0.76
Max. used T:	450°C
Flashpoint:	0°C

PACKAGING TYPE	NET WEIGHT
Canister	1 L (0,72kg)
Canister	3,8 L
Canister	30 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. The expiry date is stated beneath the production date on the labels of each container.