

# **TECHNICAL DATA SHEET**

### SK2TR450-14

Semipermanent release agent

### ► DESCRIPTION

SK2TR450-14 is a sprayable solvent-based semi-permanent mould release agent used in the processing of thermoset resins such as polyester, vinyl ester, epoxy and phenolic resins, from non-porous or gel-coated moulds. The product combines straightforward handling with excellent release performance and allows for multiple releases per application. Since the release coating does not transfer to the moulded parts, downstream processes, such as varnishing, are not impaired. Being versatile with regard to the type of mould surface used, Release agent SK2TR450-14 minimizes mould build-up and provides an instant high gloss finish. The ability to spray apply remarkably fastens the release agent application as compared to traditional wax-based pastes. After curing, the release film is temperature stable up to 450°C. The product is ideally suited for non-skid or textured large open moulds.

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

### ► APPLICATION

As with all processes involving solvents, Release agent SK2TR450-14 should only be handled in a well-ventilated area.

Cleaning process:

Make sure to remove all residues of dirt and former release agents, especially wax- and silicone-based release agents, from the mould surface prior to applying Release Agent SK2TR450-14. Application on top of other semi-permanent release agents is possible, but not recommended. For cleaning we recommend using our Cleaners SK2TR000-1 and SK2TR000-2.

Base Coating:

Release Agent SK2TR450-14 is usually applied by means of spraying. Although using any spray gun capable of fine atomization will be sufficient, we highly recommend applying a high volume low pressure spray gun since according to experience this will result in best release performance and product quality. Set the pressure to approx. 2-2,5 bar and hold the nozzle (preferred < 1,5 mm) of the gun approx. 20-25 cm from the mould surface. The output should be adjusted to allow for film drying in about 2-3 s after spraying. Systematically coat the entire surface of the mould. Special care should be taken to the over-lap spray areas. Immediately after applying the first layer, apply a second coat rectangular to the first. To complete the whole coating process, follow these guidelines and apply 2-3 coating layers of Release Agent SK2TR450-14 to the mould.

It remains responsibility of the user to verify that this product meets the requirement of the process applied.



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After application of the final layer, allow the release agent to cure for at least 30 min at room temperature. In case of using new, repaired or porous moulds, apply a further 2 coats to ensure best release performance. In order to avoid hazing and poor durability of the release film, we recommend to test the gun settings as well as the spray technique on the mould edge first

and to immediately remove over application or drippings by means of wiping or rubbing with a clean dry cloth. Then, reapply release agent SK2TR450-14 in the same manner as described above.

Mould touch-up:

Since the release film wears during running production, touch-up coatings should be applied frequently. 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 help maintaining a constant high quality of the moulded parts. We recommend touch-up of the complete mould.

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 (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: Composition: Density [g/cm3]: Flashpoint: Colourless liquid Resin mixture in solvents Approx. 0.72 0°C

### ► SIZE

Packaging
Box of 15 Cans x 1 L (0,72 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.