



**TECHNICAL DATA SHEET
TS-550**

DESCRIPTION:

Factor II Inc. TS-550 Silicone Dispersion is a transparent, two component dimethyl silicone elastomer dispersed in Cyclohexane. TS-550 is a system of medium viscosity liquids that blend easily in a convenient 1:1 ratio by weight or volume. TS-550 is useful in the dip casting and heat curing of thin transparent elastomeric films.

APPLICATIONS:

TS-550 is a Heat Cured, dispersion material useful in the fabrication of thin strong elastomeric appliances. This material has the highest tear strength of all the barriers and is useful for lining silicone appliances.

MIXING:

The TS-550 individual components should be thoroughly mixed just prior to their addition. Add equal parts of part A to part B and mix thoroughly. Trapped air added during; mixing should be removed by vacuum, but care should be exercised to prevent solvent loss during deairing. Additional dilution for thin film applications may be accomplished by the addition of appropriate solvent followed by mixing and deairing.

TYPICAL PROPERTIES AS SUPPLIED:

| | |
|------------------------------------|-----------------|
| Color..... | clear |
| Solids content, wt.% | 18 |
| Solvent. | CCH Cyclohexane |
| Viscosity, cps | 250 |
| Working time, at 25°C, hours | 24 |
| Mix ratio | 1:1 |
| Cure system..... | Pt Addition |

TYPICAL CURED PROPERTIES:

| | |
|-----------------------------|-------------------|
| Appearance | clear, dispersion |
| Specific gravity | 1.12 |
| Refractive index..... | 1.41 |
| Durometer..... | 65 |
| Tensile Strength, psi | 1500 |
| Elongation, % | 845 |
| Tear Strength | 260 |
| Modulus, 100%, psi | 100 |



TYPICAL CURE SCHEDULE:

(Following Solvent evaporation)

TS-550 is designed to cure at elevated temperatures following the removal of the solvent. The following table illustrates the effects of temperature cure time. Between each coat solvent must be allowed to evaporate. Minimum of 15 to 20 minutes should be allowed between each coat. Build up to desired thickness (after buildup) cure slowly at following temperatures

| | |
|------------|------------------------------------|
| 30 minutes | @ room temperature (after buildup) |
| 30 minutes | @ 125°F |
| 30 minutes | @ 165°F |
| 60 minutes | @ 212°F |

This material can be cured from 100°F to 300°F. Blistering will occur if solvent has not been eliminated. **Times can be adjusted but the gradual driving off of the solvent is what is important.**

MOLD & SUBSTRATE CONSIDERATIONS:

TS-550 will cure in contact with most materials. Exceptions include butyl and chlorinated rubbers, some RTV silicones, and unreacted residues of some curing agents.

Mold
GYPSUM

Mold Release
PVA

STORAGE AND SHELF LIFE:

Factor II warrants products for six months from the ship date. REFRIGERATION MAY EXTEND THE SHELF LIFE, BUT CARE SHOULD BE TAKEN TO WARM THE MATERIAL TO AMBIENT TEMPERATURE BEFORE OPENING THE CONTAINER.

CAUTION:

THE SOLVENT CARRIER IN TS-550 IS HAZARDOUS AND THE MSDS FOR TS-550 SHOULD BE CONSULTED PRIOR TO USE.

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