



Factor II, Incorporated

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PRODUCT INFORMATION 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.%..... 16
Solvent.....CCH Cyclohexane
Viscosity, cps5000
Working time, at 25°C, hours..... 24
Mix ratio 1:1
Cure system..... Pt Addition

TYPICAL CURED PROPERTIES:

Appearanceclear, elastomer
Specific gravity 1:12
Refractive index..... 1.41
Durometer65
Tensile Strength, psi..... 1500
Elongation, %845
Tear Strength240
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:

TS-550 has a shelf life of six months from the date of shipment when stored at room temperature in the original unopened containers. REFRIGERATION MAY EXTEND THE SHELF LIFE, BUT CARE SHOULD BE TAKEN TO WARM THE MATERIAL TO AMBIENT TEMPERATURE BEFORE OPENING THE CONTAINER.

SPECIFICATIONS:

The typical properties shown in this technical profile should not be taken as a basis for preparing specifications. Please contact Factor II, Inc. for assistance and recommendations on specification limits.

CAUTION:

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

IT IS RECOMMENDED THAT THE PURCHASER THOROUGHLY TEST PERFORMANCE AND SAFETY OF ALL APPLICATIONS PRIOR TO FULL SCALE PRODUCTION OR COMMERCIALIZATION, TYPICAL APPLICATIONS IN THIS TECHNICAL PROFILE SHOULD NOT BE TAKEN AS INDUCEMENT TO INFRINGE ANY PATENT. MANUFACTURER WARRANTS ONLY THAT ITS PRODUCTS MEET ITS SPECIFICATIONS. THERE IS NO WARRANTY OF MERCHANTABILITY OF FITNESS FOR USE OR ANY OTHER EXPRESS OR IMPLIED WARRANTIES. FACTOR II MAKES NO GUARANTEE OF SATISFACTORY RESULTS FROM RELIANCE UPON INFORMATION, STATEMENTS OR RECOMMENDATIONS CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FROM ANY RESULTING LOSS OR DAMAGE.