

Product Data

Silicone for Paper Release Coating TPR6700N / XC94-C0379

TPR6700N is a silicone solution prepared for coating on paper, foils and plastic substrates. It utilizes a platinum catalyzed addition cure. TPR6700N is cross-linked by XC94-C0379. The typical formulation is TPR6700N/XC94-C0379=100/1 (weight parts).

KEY FEATURES

- ◆ Low temperature/high speed cure
- ◆ Non-blocking
- ◆ Stable aged release
- ◆ General type

APPLICATIONS

- ◆ Back coating for adhesive tapes
- ◆ Release papers such as wallpapers and labels
- ◆ Release films
- ◆ Sliding papers
- ◆ Water-repellent finishing for papers and fibers

TYPICAL PROPERTY DATA

UNCURED PROPERTIES		TPR6700N	XC94-C0379
Appearance		Colorless, transparent	Light-Straw
Silicone content	%	30	-
Viscosity (25°C)	Pa·s {P}	15 {150}	-
Specific gravity (25°C)		0.9	0.87
Solvent		Toluene/Xylene	Xylene
CURED PROPERTIES*			
Release force (0.3m/min)	N/2.5m {gf/2.5cm}	12 {12}	
Subsequent adhesion force	%	96	
Cure time (Tack free, 90°C)	s	10	

*TEST CONDITION

1. Evaluation of release force

1-1.-Preparation of silicone coated paper

Formulation ----- TPR6700N : XC94-C0379=100 : 1 (by weight)

Base sheet ----- polyethylene-laminated paper (75g/m²)

Coating weight of silicone---- 0.8g/m² (dry)
Cure condition----- 30s at 140°C
Aging condition ----- 1 day at 25°C, 50%RH

1-2.-Test tape

Tape ----- Tesa7475
Aging condition ----- 1 day at 70°C, 50%RH

2. Evaluation of subsequent adhesion force

Test tape ----- Nitto 31B
Aging condition----- 20h at 70°C

Typical property data values should not be used as specifications.

INSTRUCTIONS FOR USE (PREPARATION OF COATING BATH)

Dilute TPR6700N to desired silicone concentration with solvent and stir until completely dissolved. Add the required amount of XC94-C0379 catalyst agent and mix thoroughly.

Typical Formulation (for 5%silicone content)

TPR6700N	100 (weight parts)
Toluene (solvent)	499 (weight parts)
XC94-C0379 (catalyst)	1 (weight parts)
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Total	600 (weight parts)

HANDLING AND SAFETY

- ◆ TPR6700N is an addition cure type. Proper care should be taken to ensure that catalytic poisons such as amines, sulfur, organic tin compounds, etc are not mixed in the coating bath.
- ◆ Wear eye protection and protective gloves at all times when working with this product.
- ◆ This product contains flammable solvent and should be handled away from heat, open flame or other sources of ignition.
- ◆ Maintain adequate ventilation in the work area at all times.
- ◆ Cure speed depends on the amount of catalyst added and temperature. A preliminary test is recommended.

STORAGE

- ◆ Store in a cool, dry place out of direct sunlight.
- ◆ Keep out of the reach of children.

PACKAGING

TPR6700N

- ◆ 18kg pail available
- ◆ 180kg drum available

XC94-C0379

- ◆ 180g bottle available in cases of 10

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FOR INDUSTRIAL USE ONLY

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