

# STYCAST<sup>®</sup> T 640

## Low Viscosity, General Purpose, Two Component Encapsulant

Key Feature	Benefit
Low viscosity	Gap filling
Low toxicity	Biomedical applications

### Product Description :

STYCAST T 640 is a long pot life, low viscosity, clear, general purpose, two component system.

### Applications :

STYCAST T 640 has proven useful in biomedical applications, qualifyable to BS 6920 for drinking water applications (filters).

### Instructions For Use :

Mix ratio by weight :  
100 parts Part A  
to 35 parts Part B.

Pot life of a 100 g mixture at 25°C is 6 hours;

### Properties Of Material As Supplied :

Property	Test Method	Unit	Value
Chemistry			epoxy
Appearance Part A Part B	Visual Visual		Light yellow Amber
Density Part A Part B	ASTM-D-792 ASTM-D-792	g/cm <sup>3</sup> g/cm <sup>3</sup>	1,12 - 1,18 0,92 - 0,98
Viscosity at 25°C Part A Part b	ASTM-D-2392 ASTM-D-2392	Pa.s Pa.s	2,5 - 3,6 2,0 - 3,3

### Cure Schedule :

Cure at any of following schedules. Curing at slightly elevated temperatures decreases cure time considerably.

Cure Temperature (°C)	Cure Time (h)
18 to 25	12 h full cure in +/- 48 h
60	6
80	4

**Properties Of Material After Application :**

Property	Test Method	Unit	Value
Hardness	ASTM-D-2240 at 25°C	Shore D	80 minimum
Flexural Strength	ASTM-D-790	MPa	TBD
Flexural Modulus	ASTM-D-790	MPa	TBD
Tensile Strength	ASTM-D-638	MPa	TBD
Impact Strength	ASTM-D-256	J/cm	TBD
Thermal Conductivity	ASTM-D-2214	W/m.K	0,54
Coefficient Of Linear Thermal Expansion	ASTM-D-3386	10 <sup>-6</sup> K <sup>-1</sup>	TBD
Linear Shrinkage During Cure	ASTM-D-2566	%	TBD
Volume Resistivity	ASTM-D-257 at 25°C at 155°C	Ohm.cm Ohm.cm	TBD TBD
Dielectric Constant at 10 <sup>2</sup> to 10 <sup>10</sup> Hz	ASTM-D-150		TBD
Dissipation Factor at 10 <sup>2</sup> to 10 <sup>10</sup> Hz	ASTM-D-150		TBD
Dielectric Strength	ASTM-D-149	kV/mm	TBD
Moisture Absorption In 7 Days	ASTM-D-570	%	TBD
Machinability			TBD
Service Temperature	ASTM-D-794		TBD
Young's Modulus	ASTM-D-638	MPa	TBD
Tensile Lap Shear Strength	ASTM-D-1002 at 25°C at 120°C	MPa MPa	TBD TBD

**Storage And Handling :**

Store STYCAST T 640 in well sealed, unopened containers at temperatures between 18°C and 25°C. When stored at lower temperatures, material should be returned to room temperature prior to use.

Storage Temperature (°C)	Usable Shelf Life
18 to 25	12 months

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### Health & Safety :

It is recommended to consult the Emerson & Cuming product literature, including material safety data sheets, prior to using Emerson & Cuming products. These may be obtained from your local sales office.

### Attention Specification Writers :

The technical information contained herein is consistent with the properties of the material and should not be used in the preparation of specifications, as it is intended for reference only. For assistance in preparing specifications, please contact your local Emerson & Cuming office for details. Please contact Emerson & Cuming Quality Assurance for test method details.

(STYCAST T 640 was previously called ECCOBOND<sup>®</sup> T 640)

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E14/10/99-JLD/RVH/LF (0300s)