

Set-Cast 1-333A

Self Extinguishing Epoxy Compound UL 94VO Approved

Set-Cast 1-333A used with Set-Cure 20 or Set-Cure 111B is a moderate viscosity, self-extinguishing, epoxy potting/casting compound. It is approved for UL 94VO classification at a ¼" thickness.

Uncured Properties:	Set-Cast 1-333A	Set-Cure-20	Set-Cure 111B
Color Visual	Black	Amber	Amber
Viscosity @ 25 °C, cps	12,000 –13000	650-700	700
Specific Gravity	1.55	0.98	0.95
Mix Ratio (by Wt)	100:	12-15 by wt.	8 by wt.
Mix Viscosity, average		3000	3000
Pot Life (100g) @ 25°C, Hrs		1	2.5
Shelf Life @25,°C, months	6	12	12

Cured Properties

Hardness, Durometer (Shore D)		85	85
Tensile Strength, psi		11,500	12000
Tensile Elongation, %		2.75	3.75
Flexural Strength, psi		17,500	19,500
Compressive Strength, psi		14,000	14,500
Coefficient of Thermal Expansion, °C		48 x 10 ⁻⁶	48 x 10 ⁻⁶
Thermal Conductivity, BTU (in)/(ft ²)(hr)(°F)		4.3	4.2
Flammability Rating 94V-0		Passes	Passes
Heat Distortion Point, °C		80	155
Services Temperature, °C		105	155

Electrical Properties:

Dielectric Strength, volts/mil		410	430
Dielectric Constant, 1Khz		4.4	4.5
Dissipation Factor 1 KHz		0.02	0.02
Volume Resistivity, Ohm-cm		1 x 10 ¹⁵	1 x 10 ¹⁵

Mixing Instruction

1. Premix Set-Cast 333A in original container being certain to reincorporate any filler that may have settled.
2. Weigh out required amount of Set-Cure 20.
3. Weigh the correct amount of Set-Cast 333A to Set-Cure20 as indicated under mix ratio in uncured properties.
4. Mix thoroughly being careful to scrape sides and bottom of container to ensure proper blending.
5. Evacuate for 2-5 minutes if void free casting are requested.
6. Pour into cavity or mold.

Cure Schedule: 8-12 hours at room temperature (23°C) or 2 hours at 50°C. SET-CURE 111B: 2 hours at 100 °C (212 °F) for masses less than ½ lb. For masses above ½ lb. cure 2 hours at 80 °C, (177 °F) plus 2 hours at 100 °C (212 °F). For optimum high temperature properties, post cure 1 hour at 150 °C (302 °F)

Warranty

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Silicone & Epoxy Technology

Phone: 631-920-5079 Fax: 631-920-0503

Place Orders To: SalesSET@optonline.net

www.SET-mfg.com