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SET-CAST 290 **Epoxy Casting Compound**

DESCRIPTION:

SET-290 is a 100% solids epoxy system. It is a filled, low cost, general purpose encapsulant. SET-290 is designed for room temperature cure and has excellent moisture resistance. SET-290 is machine dispensable. SET-290 is a high density, sound deadening, radiation-opaque lead-filled epoxy compound. It is also available as a fast cure system.

PROPERTIES – UNCURED

	Part A	Part B
Color , visual	Orange	Clear
Viscosity, ASTM-D-2393 (c.p.s. @ 25° C)..	7-10,000	5-700
Specific Gravity	3.63	0.96
Mixed Specific Gravity.....	2.77	
Mix Ratio (weight).....	100:3	
Mixed Viscosity, ASTM-D-2393 (@ 25° C)	5-8000	
Pot Life @ 25°C (100 grams)	40 minutes	
Shelf Life	6 Months	

PROPERTIES – CURED

PHYSICAL

Hardness, ASTM-D-2240 (Durometer).....	Shore D 82
Tensile Strength, ASTM-D-638	8,500 psi
Tensile Elongation, ASTM-D-638	2 %
Flexural Strength, ASTM-D-790.....	9,500 psi
Coefficient of Thermal Expansion	20 x 10 ⁻⁵
Heat Distortion Point.....	80°C
Water Absorption.....	0.08%
Dielectric Strength, ASTM-D-149 (volts/mil)	419
Dielectric Constant, ASTM-D-150	3.5
Dissipation Factor, ASTM-D-150.....	0.035
Volume Resistivity, ASTM-D-257 (ohm-cm).....	1 x 10 ¹⁴
Thermal Conductivity, BTU's.....	2

MIXING INSTRUCTIONS

Pre-mix Part A and Part B separately. Then measure 100:7.5 by weight (A to B). Mix thoroughly scraping the sides and bottom of the container. Evacuate and then pour into mold or cavity.

CURE SCHEDULE

Room temperature cure @75°F with full properties after 24 hours.

To accelerate cure, allow 2 hours @ room temperature, then 2 hours @ 125°F.

STORAGE AND SHELF LIFE

Material should be stored in a sealed container, in dry conditions, at room temperature (25°C). Material is dense and should be used as soon as possible. If material is stored for more than 1 month, do so at 25oC and rotate the cans vertically on a daily or weekly basis to allow material to remain in a homogeneous state and to prevent material separation and hardening. If material has separated, heat material in an oven to 65oC for approximately one hour and mix thoroughly.

WARRANTY

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