PTE-47850

C6-57510A
C6-57511B

DEFINITION

PTE-47850™ is a highly thermally conductive adhesive/sealant and potting compound. **PTE-47850™** is designed to provide air free potting and casting of electronic devices. **PTE-47850™** is specifically developed for bonding to difficult substrates such as glass, ceramics, and metals. It is available in 4 to 1 ratio side-by-side cartridges and can be applied directly on part. No mixing or measuring required

PRODUCT DESCRIPTION

Appearance	Liquid
Odor	Faint
Color (May be modified to meet your requirements)	BLACK

Property	**Result**	**Methods**
Viscosity	6,500 +- 500 mPa·s	Brookfield RVT, Spindle 27, Small Sample Adaptor, 10 rpm, 25°C

Other information			
Work life time @ 25 ± 2ºC	60 minutes (viscosity doubles)		
Gel Time @ 25°C	2 hours (depending on mass and substrates)		
Full Cure Time @ 25°C	24 hours		
Fixture/Handling Time @ 25°C	2 hours		
Fixture/Handling Time @ 65°C	20 minutes		
Mix Ratio:	By weight:	Part A 100	Part B 12.5
	By Volume:	Part A 100	Part B 25
Possible curing cycles	24 hours at 25°C 30 minutes @ 65ºC (150°F)		
Specific gravity @ 25ºC (g/cm³)	2.0		
Storage stability (unmixed)	1 year at room temperature		

PROTAVIC AMERICA, INC.
TEL: & FAX: 800.807.2294 / INT'L: 978.372.2016
WWW.PROTAVICAMERIA.COM

APPLICATION PROPERTIES

- **PTE- 47850™**, when fully cured, is highly resistant to moisture, hot water, steam, hot antifreeze solutions, automotive fluids, detergents, gasoline, hydraulic fluids, plasticizers, cleaning agents, acids, and bases.

- **PTE-47850™** is highly resistant to vibration and can be thermal cycled between –40 and 150°C.

TYPICAL PROPERTIES OF CURED PTE-47850™

The properties set out below were determined following measurements carried out in the laboratory over a small number of tests. They are values given by way of guidance, and do not constitute a guarantee. It will be for the user, in all cases, to carry out their own tests to determine whether the **PTE-47850®** resin can be used for the particular application the user has in mind.

PHYSICO-CHEMICAL PROPERTIES

Properties	**Methods**	**Units**	**Typical values**
Cure 2 hours @ 65°C (150°F)			
Shore D hardness	ASTM D2240	-----	80
Lap shear to Al	ASTM D3163	psi	3000
Operating temperature		Degrees C	-65 to 150
Tg		Degrees C	122

ELECTRICAL PROPERTIES

Properties	**Methods**	**Units**	**Typical values**
Volume Resistivity • 100 V • 500 V	ASTM D257	Ω-cm	• 8.0×10^{14} • 6.3×10^{14}
Dielectric Constant • 120 Hz • 1000 Hz	ASTM D150	--	• 4.3 • 4.3
Dissipation Factor • 120 Hz • 1000 Hz	ASTM D150	--	• 0.002 • 0.002
Thermal conductivity		W/(mK)	• 1.3

PRECAUTIONS IN USE

Refer to the attached material safety data sheet.

PACKAGING

PTE-47850 is available in two component kits, and twin syringe cartridges like Mixpac™.
For sizes and part numbers, contact Protavic America, Inc.