

No. TD : E-053 Revision : 00 Effective Date : 16/01/2023



#### FILLING A COMPLETE ELECTRONIC ASSEMBLY

#### **PRODUCT DESCRIPTION**

**EPOXY POTTING EPT-277-2K** is two components solvent-free epoxy specially designed to fill a complete electronic assembly to improve resistance from shock, vibration, moisture/or water and any other corrosive materials. This product have good electrical insulation (to prevent short circuit), but sufficient heat conductivity (to prevent overheat).

#### **FIELDS OF APPLICATION**

Electronic industry

#### **PRODUCT FEATURES**

- Good electrical insulation
- Sufficient heat conductivity
- Solvent free, low odor
- Good flow, easy to apply

# **PRODUCT SPECIFICATION**

Туре	:	Two components solvent-free epoxy Component A EPOXY POTTING EPT-277-2K	Component B HARDENER EPTH-277 PS		
Color	:	Black	Clear yellowish liquid		
Specific gravity		1.90 ± 0.04 gr/ml	0.98 ± 0.02 gr/ml		
Solid by volume (mixture)	÷	98 ± 1 %			
Flash point Material consumption	:	n.a. Varried, at least 6000 gr/m²			
	•	vanieu, at least 0000 gi/m			
Drying time (@ 30°C)	:				
1. Surface dry	:	4 hours			
2. Hard dry	:	16 hours			
3. Full cure	:	7 days			
Packaging	:	1 Kg-set			
Storage stability	:	Two year in cool and dry storage (above free unopened box.	ezing point) and in original		
Mixing ratio by weight	:	Comp A : B = 4 : 1 w/w			
Pot life (@30°C)	:	30 minutes			
Application method	:	Pour			
Substrate	:	Electrical assembly, Printed Circuit Board (F	PCB)		
Application viscosity	:	Ready for Use			
Re-coating interval	:	16 hours			
		T = 25-35 °C, RH = maximum 80%			
Provide adequate ventilation during application and drying					

# FILM PROPERTIES

Item		Result	Standard Test
Adhesion on Substrate	:	5B	ASTM D3359
Electrical Resistance: - Surface to surface	:	> 1 x 10 <sup>9</sup> Ohm	ASTM F-150
Impact Resistant	:	50 cm, 1 Kg load	ASTM D-2794
Shore D Hardness	:	80	ASTM D-2240

\*all properties tested using panel that has been cured for at least 28 days @ 30°C

# OTHERS

Shelf life	:	24 months.
Storage and handling	:	Store at maximum temperature 35 °C. If store under elevated temperature will shorten the shelf life. Avoid from heat and direct
		sunlight

# SUBSTRATE PREPARATION

Make sure that electrical assembly meets the project design requirement, before applying this product. Cover the external port, and make proper mold around the object.

# APPLICATION INFORMATION

- 1. Mix **EPOXY POTTING EPT-277-2K** with **HARDENER EPTH-277 PS** at mixing ratio A:B = 4:1 (w/w), using electrical mixer or appropriate method.
- 2. Pour the mixture on the substrate.
- 3. Leave it dry for at least 24 hours.
- 4. Good ventilation and air circulation in working area is suggested.

# SIMPLIFIED RECOMMENDED COATING SYSTEM

No.	APPLICATION STEP and PRODUCT CODE	MIXING	RECOMMENDED COATING AMOUNT	CURING @ 30 ℃.				
Subs	Substrate: Electrical assembly, PCB							
	Create a proper mold around the object							
1	Epoxy Potting							
	EPOXY POTTING EPT-277-2K	4	6000 gr/m <sup>2</sup>	16 hours				
	HARDENER EPTH-277 PS	1	for 3000 mic DFT	TO HOUIS				

#### SAFETY PRECAUTION

Avoid contact with the skin and eyes. Wear suitable protective clothing such as goggles, masks, and gloves. For more information, please refer to our safety data sheet.

#### FIRST AID:

- Eye contact : Rinse immediately with plenty of water for at least 15 minutes; seek medical advice.
- > Skin contact : Wash with soap and water. If irritation occurs, seek medical advice.
  - Ingestion : Provide symptomatic treatment and seek medical advice.
- > Inhalation : Remove person to fresh air. Keep patient rested and give artificial respiration.

### DISCLAIMER

This document contains information issued based on the best and latest of Propan's knowledge in accordance to laboratory testing and practical application experience. The end user must test the product's suitability for their specific application and purpose. Propan shall not be liable for defects where the application of the Product has not been made fully in accordance with the recommendations and requirements. This document is subjected to change without further notice. Please consult Propan for any specific guidance on the suitability of this product for their needs or for any specific application practices.