AP-9622 Polyurethane Encapsulant

I. PRODUCT DESCRIPTION

It is a two-part polyurethane potting structural adhesive that can be cured at room temperature or with heat. It is suitable for encapsulation and sealing in automotive electronics, sensors, and electronic appliances. After curing, it exhibits high strength, high toughness, good bonding properties, and resistance to moisture and other atmospheric components. It is solvent-free, has no curing by-products, and maintains stable mechanical and electrical properties between -45 and 130℃.

II. FEATURES AND BENEFITS

- Two-part, room temperature/curing by heating
- 100% solid content, no harmful volatile substances, non-toxic, environmentally friendly
- Good electrical properties
- Low water absorption
- Good adhesion

III.TYPICAL PROPERTIES （CA05）

Uncured Material			
Property	**Method**	**Unit**	**Value**
Appearance	Visual Estimation	/	Part A: Blue Part B: Yellow
Viscosity	GB/T 2794-1995	mPa·s	A:4000-6000 B:7000-10000
Density	GB/T 13477.2-2002	g/cm³	A:1.35±0.1 B:1.15±0.1
Mixed Material			
Property	**Method**	**Unit**	**Value**
Mix Ratio (by weight)	/	/	1:1
Pot Life（@25℃）	GB/T 7123.1-2015	min	10-15
Cured Material			
Property	**Method**	**Unit**	**Value**
Color	/	Visual Estimation	Green
Applicable temperature range	/	℃	-45-120

Short-term temperature	/	℃	130
Tensile strength	GB/T 528-2009	MPa	≥8
Hardness	GB/T 531-1999	Shore D	≥40
Shear strength @ PC/PC	GB/T 7124-2008	MPa	≥5
Elongation at break	GB/T 528-2009	%	≥50
Water absorption rate	GB/T 1034-2008	%	＜0.5
Breakdown Voltage	GB/T 1408.1-1999	kV/mm	≥18
Volume Resistivity	GB/T 1692-1992	Ω·cm	＞1.0×10^{11}
Dielectric Constant	GB/T 1694-1981	50Hz	3.5
Flame retardant @ 2.0mm	GB/T 2408-2008	UL94	V0

IV.TYPICAL APPLICATIONS

- Electronic components encapsulation protection for automotive applications;
- Sensor encapsulation protection;
- Electronic and electrical encapsulation protection;
- Transformer and reactor protection;
- Suitable for substrates with high strength and flame retardant requirements, especially exhibiting excellent bonding strength to substrates such as Al, PET, PC, ABS, etc.

V. CONFIGURATIONS AVAILABLE

400ML/tube (1/1 double tube).

VI.STORAGE

Unless the label specifies otherwise, the ideal storage conditions for this product are below 25℃, with unopened products being sealed and stored in a dry place. To avoid contamination of the original product, no used products should be poured back into the original packaging; below 25℃, the shelf life of this product is 6 months.

VII. HANDLING

- When mixing, do not introduce too much air.
- It is recommended to use an automatic mixing device, which can fully mix the resin and curing agent without introducing air.
- During storage, the product should be kept in a sealed state, isolated from air, to prevent moisture absorption.

- The product must be thoroughly mixed when used, as insufficient mixing can lead to unstable resin performance or incomplete curing.
- For safety precautions regarding this product, please refer to the Material Safety Data Sheet (MSDS).

DISCLAIMER:

The data provided in this manual are measured under specific conditions and may vary slightly due to different usage environments. It is recommended that users conduct preliminary tests before use to confirm suitability for intended purposes. If any issues arise during use, please contact the SHENZHEN ANPIN SILICONE MATERIAL CO.,LTD.