

Introduction

Darbond® thermal conductive silicone encapsulant 2525H-20 is a two-component addition-cured silicone rubber, which can cure at room temperature or quickly at elevated temperature. This product has anti-toxic property, low viscosity, good fluidity, low shrinkage after curing, and excellent flame-resistance, thermal conductivity and electrical insulation properties.

Typical Applications

To encapsulate and protect the inverter, LED power supplies, electronic accessories, etc, especially precision components, from moisture, dust, corrosion and shake.

Typical Properties of Silicone Encapsulant

	Typical Value	Range
Appearance: Part A	Pink fluid	
Viscosity (Part A, mPa.s) (Brookfield viscometer, #4 rotor, 20RPM, 25°C)	3500	3000-4000
Density (Part A, g/cm ³) (GB/T 13354-1992)	2.8	2.7-2.9
Appearance: Part B	White fluid	
Viscosity (Part B, mPa.s) (Brookfield viscometer, #4 rotor, 20RPM, 25°C)	3500	3000-4000
Density (Part B, g/cm ³) (GB/T 13354-1992)	2.8	2.7-2.9
The mixing ratio (weight ratio; A:B)	1:1	0.98-1.02
Appearance: mixed	Pink fluid	
Viscosity (mixed, mPa.s) (Brookfield viscometer, #4 rotor,	3500	3000-4000

20RPM, 25°C)		
Working time (min, 25°C)	60	≥60
Heat Cure Time (h@25°C)	12	≥12
Heat Cure Time (min@80°C)	30	25-35
Hardness (Shore 00)	55	45-65
Tensile Strength (Mpa)	1.5	≥1.0
Elongation (%)	55	≥50
Volume resistivity (Ω.cm)	10 ¹²	≥10 ¹²
Surface resistivity (Ω)	10 ¹²	≥10 ¹²
Linear CTE(by TMA) µm/m- °C or ppm	135	≥100
Dielectric strength (KV/ mm) (GB/T1408.1-1999)	10	≥10
Thermal conductivity (W/m.K) (ASTM D5470)	2.0	
Temperature range	-65~200°C	
Shelf life (8-28°C, month)	12	≥12
UL94 Flame Classification	94 V-0	
UL certificate number	E346000	
Environmental certification	ROHS, REACH	
Quality system certification	IATF-16949	

Directions for Use

Oven atmosphere: nitrogen (recommended) or air;
The existence of some substances could inhibit or influence curing:
Organic tin and other metal compounds;
Silicone rubber containing tin catalyst;
Sulfur, sulfur compounds, polysulfone compounds or other sulfur-containing compounds;
Amine, polyurethane rubber or other ammonia containing substances;
Phosphorus containing substances;
Unsaturated hydrocarbon plasticizers;
Flux residues, etc.

Shenzhen Darbond Interface Materials Co., Ltd.
No. 88 Jiaoyu Road, Longgang, Shenzhen, Guangdong, China
Tel: +86 755 28396970 Fax: +86 755 28396971

The information given and the recommendations made herein are base on our experience and are believed to be accurate. No guarantee as to or responsibility for their accuracy can be given or accepted, however and no statement herein is to be treated as a representation or warranty. In every case we urge and recommend that purchasers, before using any product, make their own tests to determine, to their own satisfaction, its suitability for their particular purposes under their own operation conditions.

Clean the surface of pasted object to get rid of oil, water, dust, and other impurities;

Weight Part A and Part B accurately;

Blend: Mix the Part A and Part B evenly, using vacuum degassing if necessary.

(Some sedimentation maybe exist in the bottom of Part A or Part B. Please stir evenly before mixing.)

Pouring: Mixture should be used up within the working time, otherwise its viscosity will increase leading to it not suitable for pouring.

Attention

Keep away from children.

This product belongs to the addition-cured silicon rubber without irritation to skin and eyes.

Recommend for use in well ventilated place. In case of splashing into eyes, rinse with water immediately.

For more information, please refer to the MSDS of this product.

Packaging Specifications

Ordering code: 2525H-20;

Part A, B: each 20kg/barrel, 40kg / sets.

Storage

Seal and store in cool (8-28°C) and dry place.

Shelf life: 12 months.

Shenzhen Darbond Interface Materials Co., Ltd.
No. 88 Jiaoyu Road, Longgang, Shenzhen, Guangdong, China
Tel: +86 755 28396970 Fax: +86 755 28396971

The information given and the recommendations made herein are base on our experience and are believed to be accurate. No guarantee as to or responsibility for their accuracy can be given or accepted, however and no statement herein is to be treated as a representation or warranty. In every case we urge and recommend that purchasers, before using any product, make their own tests to determine, to their own satisfaction, its suitability for their particular purposes under their own operation conditions.