



凯美亚化学有限公司
KEMIACHEM CO., LIMITED.

High temperature resistant

Encapsulant 7188A/B

1 . Feature

7188A/B is a two components transparent liquid thermoset alicyclic epoxy resins which is developed for high power LED lens adhesive. It has excellent yellowing resistance, UV resistance and long time life at 200 °C

2 . Typical Properties Before Curing

Item	Unit	Resin 7188A	Hardener 7188B
Component		Alicyclic Epoxy Resin	Acid Anhydride
Color		Transparent	Transpatent
Mixture Ratio	wt	100	100
Density (25°C)	g/cm ³	1.16	1.18
		1.17 (mixture)	
Viscosity (25°C)	mPa · S	2000 ± 500	80 ± 20
		400 ± 50 (mixture)	
Gel Time (120°C)	minute	8 ± 3	

PS: The above are representative of values, not specification value

3. Recommended IFU (Clean containers and tools before use. Introduction of foreign matter may affect performance of Encapsulant)

Step	Action	Caution
1. preheating of resin	Clean the container before use, 100 aliquots of 7188A is preheated at 80°C for 40min.	Make sure container is clean
2. Mixing	100 aliquots of 7188B is added into 7188A, which is already preheated. Mix well with mixing propeller at 200rpm for 10-20 min.	A: B=100:100 (w/w) make sure proper mixing



3. Defoaming	Vacuum machine with vacuum degree at -0.1MPa is used for 2-10min until bubbles are completely removed.	Make sure there is no bubble left
4. Molding	Pour the mixture resin into the required mould	Make sure there is no other foreign matter within the mould
5. Roast	Keep mould in the oven at 150°C for 1.5h	Make sure there is no other resin in the oven. Timing begins after oven temeperature reaches 150°C

Notes: the mixture should be used within 10h after mixing. Viscosity would rise over time, which will influence performance. Call technical service if you have any questions.

4. Typical Properties After Curing

Item		Unit	Value	Remarks
Recommended Curing Conditions		150°C × 1.5h		
Glass Transition(T _g)		°C	158	TMA
CTE	< T _g	ppm/°C	65	40°C ~80°C
	> T _g		168	190°C ~210°C
Flexural Strength		N/mm ²	95	GB/T 2567-2008
Flexural Modulus		N/mm ²	3000	GB/T 2567-2008
Hardness(Shore D)			> 85	Shore D
Refractive Index			1.50 ± 0.01	Abbe
Water Absorption		Wt%	0.3	100°C /1hr

PS: The above are representative of values, not specification value

5. Packaging

7188A:1.0kg Fluoride Drum

7188B:1.0kg Fluoride Drum

6. Shelf Life

6 months under room temperature.

7.Safety

7188A may cause injury to skin following prolonged or repeated contact. Prevent prolonged or frequent contact. if contact occurs, wash at first opportunity with soap and water.

7188B may cause skin sensitization or other allergic responses. Avoid inhalation of vapor. Prevent all skin contact. If contact occurs, immediately with soap and water.

If you need to know about Safety and operating method of the detailed content, please refer to the MSDS (Material Safety Data Sheet).