

ThreeBond 2273D

One Component Epoxy Resin

ThreeBond **2273D** is a one component solvent free epoxy resin. It cures rapidly when heated in an oven, by an IR lamp or by induction. It provides good adhesion to most materials and has excellent mechanical, thermal and chemical resistance. It has been particularly developed for magnet bonding applications.

1. Features

- One component solvent free epoxy
- No mixing required
- Heat curing
- Service temperature : -40 / +150°C
- Magnet bonding
- Potting, fixing and sealing electric and electronic components

2. Properties

Before curing

Test	Results	Unit
Colour	White	-
Viscosity at 25°C	75	Pa.s
Specific gravity at 25°C	1.20	-
Curing time at		
120°C	60	min
150°C	30	
175°C	15	
200°C	5	
250°C	1.30	

After curing

Test	Results	Unit
Hardness	86	Shore D
Shear strength - Fe at		
25°C	35	MPa
100°C	25	
130°C	20	
160°C	10	
Peel strength - Fe	6000	N/m

Test	Results	Unit
Water absorption (100°Cx2h)	+ 0.4	%
Start reaction temperature	100	°C
Peak reaction temperature	150	°C
End reaction temperature	240	°C
Total energy	449	mJ/mg
Glass transition temperature	120	°C
Thermal expansion coef.	62	ppm/°C
Young modulus at 25°C	3.5	GPa
E'' peak	125	°C
tan δ peak	125	°C
Volume resistivity	9.6×10^{13}	Ω.m
Surface resistivity	6.9×10^{16}	Ω
Dielectric constant at 1MHz	4.1	-
Dielectric dissipation factor at 1MHz	0.025	-
Dielectric breakdown voltage	20.3	kV/mm

3. Handling

- Before use, please refer to the safety data sheet.
- Prior to opening the container, let it reach room temperature to avoid condensation inside.
- To obtain optimal results, remove humidity, grease and other impurities from the surfaces to be assembled.
- Depending on the materials (dimensions and surface roughness), apply an appropriate and uniform amount of liquid gasket on the surface, then assemble rapidly.
- The curing time may change depending on the quantity applied, the heat source and the part's material.
- The product once transferred into another container should not be returned to the original one. Any excess product should be wiped out using a cloth.

Data given here were compiled to the best of our knowledge and are based on experiments and tests of our Company. We cannot guarantee the results obtained through the use of our products, and all products are sold and samples given without any warranty, expressed or implied, of fitness for any particular purpose or otherwise and upon condition that the user shall make his own tests to determine the suitability of the product for his purpose.

- Excess product may be removed using TB2890D cleaner.
- Keep the product in its original container tightly sealed and store it in a dark, dry and well ventilated place at **-5 ~ 10°C**.