





# SANHO CHEMICAL CO., LTD.

NO. 1, ZHONGSHAN S. RD., LUZHU DIST., KAOHSIUNG CITY, TAIWAN.  
 TEL : 886-7-6962211~3 http : // www.sanho.com.tw  
 FAX : 886-7-6976993 (Sales) E-mail : sanho@sanho.com.tw  
 FAX : 886-7-6961782 (Export) E-mail : sanho@so-net.net.tw

## 4.MECHANICAL PROPERTIES

Epoxy resin : bisphenol-A type liquid epoxy resin whose epoxy equivalent weight is about 190. Precured at 23°C for 7 days, and settle in room temperature for one day then put in oven 80°C for one hours.

CURING CONDITION		23°C			80°C / 1hr
Epoxy resin / TOHMIDE 245		100 / 43	100 / 54	100 / 67	100 / 54
Tensile Strength	(kgf/mm <sup>2</sup> )	2.5	3.6	4.5	7.3
Bending Strength	(kgf/mm <sup>2</sup> )	7.2	8.3	8.0	8.8
Flexural Modulus	(kgf/mm <sup>2</sup> )	2.0×10 <sup>2</sup>	2.4×10 <sup>2</sup>	2.3×10 <sup>2</sup>	2.9×10 <sup>2</sup>
Compressive strength	(kgf/mm <sup>2</sup> )	7.1	7.4	7.2	8.1
Izod Impact Strength	(kgf/cm-cm)	2.5	2.9	3.3	2.2
Rockwell Hardness	(M-scale)	32	36	36	77
Heat Distortion Temp	(°C)	40	46	49	57

## 5.LAP SHEAR STRENGTH

A resin mix of Tohmide245 and the same epoxy resin as employed above were cured at 22-23°C, and applied to bond mild steel plates whose surfaces were pre-treated by sand-blast. Thereafter, LAP SHEAR STRENGTH of the cured products were measured 7 days after bonding them at 22-23°C by the mixtured resins.

Epoxy resin / TOHMIDE 245	100 / 33	100 / 43	100 / 54	100 / 67	100 / 82
Lap shear strength (kgf/ mm <sup>2</sup> )	18	17	17	16	17

## 6.CHEMICAL RESISTANCE

Percentage increase in weight of the cured products of Tohmide 245 and the same epoxy resin as employed above were measured as follow after being cured at 22-23°C for 7 days, and immersing them into respective chemical substances.

Unit : %

Immersion time (days)	7 days			30 days		
	42	54	67	42	54	67
Epoxy / TOHMIDE 245 (Mixing Ratio by weight)						
Tap Water	0.4	0.5	0.5	1.2	1.1	1.3
5% solution of Salt	0.4	0.4	0.4	1.0	1.1	1.1
10% solution of Caustic soda	0.3	0.3	0.4	1.0	0.9	1.0
10% solution of Ammonia	0.4	0.4	0.4	1.0	1.0	1.3
5% solution of Sulfuric Acid	1.0	2.2	5.7	1.9	4.3	11
5% solution of Hydrochloric Acid	0.7	1.3	3.2	1.6	2.8	6.8
Kerocene	-0.1	-0.1	-0.1	0.1	0.0	0.0
Isopropylalcohol	1.0	1.1	1.9	2.0	2.4	3.9
Methylisobutylketone	15	7.8	5.3	27	16	12