

Jul.2022

MITSUBISHI CHEMICAL CORPORATION

Palace Building, 1-1, Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8251, Japan

TECHNICAL DATA SHEET

jer™ YX8000D

DESCRIPTION

jER[™] YX8000D is a hydrogenated bisphenol A type liquid epoxy resin.

APPLICATION

jER[™] YX8000D is a high purity alicyclic epoxy resin with colorless and transparent, that is used for optical materials e.g. LED encapsulant, adhesive for display.

SALES SPECIFICATION*

Property	Value	Unit	Test Method
Epoxy Equivalent Weight (WPE)	175 - 195	g/eq	Potentiometric Titration
Viscosity at 25°C	<= 1500	mPa.s	Capillary Viscometer
Total-Cl	<= 1200	ppm	Potentiometric Titration

TYPICAL PHYSICAL PROPERTIES*

Property	Value	Unit	Method
Appearance	Colorless Liquid		Visual Inspection
Refractive index	1.50	-	D line(589nm)
Density at 25°C	1.1	g/cm ³	Density meter (Vibration type)

*based on Mitsubishi Chemical test methods.

Technical data sheets may change frequently. Please contact us at https://www.m-chemical.co.jp/en/contact/products/index.php?code=1201048 if you have any further questions.

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PROPERTIES FORM	ULATION					
			Value		Unit	Method
jer™ YX8000D			100	-	phr	
Other company's hydrogenated bisphenol A type epoxy		-	100			
Anhydridecuringagent(Methylhexahydrophthalic anhydride/Hexahydrophthalic anhydride = 70/30)			89	77	phr	
Curing accelerator (Methyltributylphosphonium dimethylphosphate)			1	1	phr	
Gel time @ 120 °C			30	36		
Curing condition		100°C/3h + 130°C/3 h				
Cured state properties						
Tg (tanδ)			135	-	°C	Dynamic Mechanical Analysis
Elastic modulus @ 30 °C		3.4	-	GPa		
Elastic modulus @ 220 °C			17	-	MPa	
Тg			136	110		Thermo Mechanical Analysis
Coefficient of Thermal Expansion (α 1)			68	75	ppm	
Coefficient of Thermal Expansion (α2)		172	186	ppm		
Moisture absorption rate 168h		72hr	0.80	0.90	%	85°C 85%RH
		168hr	0.83	0.92	%	
Light resistance (Weathermeter, 0.4kw/m^2)	Yellowness index	0hr	1	1	-	
		168hr	7	16	-	
	Light transmittance at 360 nm	0hr	86	85	%	
		168hr	53	35	%	

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HANDLING & STORAGE

Please refer to the latest version of SDS. Carefully read the SDS before using, handling, transporting, storing or disposing jER[™] YX8000D.

jER[™] YX8000D should be stored in tightly closed containers under exclusion of humidity at gentle temperatures. Avoid exposure to direct sunlight. Under these storage conditions the product has a minimum shelf life of three (3) months from date of delivery.

PACKAGING

Steel drum with 200 kg net and metal can with 20 kg net

OTHER INFORMATION

Further Related Documents Safety Data Sheet, jER[™] Epoxy Resin Catalogue

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