

Technical Data Sheet

EPIKURE™ Curing Agent 3115 3115-E-73 3115-X-70

Product Description

EPIKURE Curing Agent 3115 is a high molecular weight, reactive polyamide, high viscosity epoxy curing agent based on dimerized fatty acid and polyamines. For ease in formulating and handling, EPIKURE Curing Agent 3115 is also available in solutions of isopropyl alcohol at 73% solids and xylene at 70% solids. Other solutions are available upon request.

Application Areas/Suggested Uses

- Maintenance and marine coatings
- Tank and pipe coatings
- High gloss coatings
- Masonry and pool coatings
- Adhesives, caulks and grouts

Benefits

- Excellent water and corrosion resistance
- Excellent adhesion
- Excellent pigment and substrate wetting
- Good chemical resistance
- Long pot life

Sales Specifications

Property	Units	EPIKURE 3115	EPIKURE 3115-E-73	EPIKURE 3115-X-70	Test Method/Standard
Amine value	mg/g	230-246	170-185 ¹	161-173 ¹	ASTM D2896
Viscosity at 25°C	cP	---	Z-Z2	V-Z	ASTM D1545
Viscosity at 40 °C	P	500 - 750	---	---	ASTM D2196
Color	Gardner	9	9	9	ASTM D1544
Solids	%m/m	100	72.5-74.0	69-71	ASTM D1259

¹ – Amine Value is based on the solution

Typical Properties

Property	Units	EPIKURE 3115	EPIKURE 3115-E-73	EPIKURE 3115-X-70	Test Method/Standard
Equivalent weight, approx.		156	156	156	
Flash point	°C	252	16	29	ASTM D93
Mix Ratio					
EEW 190		82	---	---	
EEW 525		54	54	54	
Density @ 25 °C	lbs/gal	8.1	7.6	7.8	
Appearance		Clear	Clear	Clear	

Performance Properties

Table 1 / Physical Properties of Epoxy Resin cured with EPIKURE Curing Agent 3115

	Method	Units	A	B
Epoxy Resin (EEW 190)		pbw	100	100
EPIKURE Curing Agent 3115		pbw	82	180
Viscosity @ 25°C		P	172	240
Pot Life @ 25°C, 100 g		minutes	330	270
Tensile Strength	ASTM D638	psi	6,350	3,800

	Method	Units	A	B
Flexural Strength	ASTM D790	psi	11,000	5,800
HDT	ASTM D648	°C	43	---
Hardness	ASTM D2240	shore D	83	73

Table 2/ Starting Formulation – Clear Coating

	Method	Units	PBW	Gallons

Part A

Epoxy Resin (EEW 525)			308.0	31.10
MIBK			91.5	13.70
Xylene			102.5	14.20
Dowanol PM			11.0	1.42
Beetle 216-8			16.5	1.93

Part B

EPIKURE Curing Agent 3115			171.0	21.11
Toluene			103.0	14.22
Ethylene glycol ethyl ether			12.0	1.55

(NOTE: Mix components A and B until homogenous.)

Nonvolatiles		%	60	

	Method	Units	PBW	Gallons
Epoxy : Hardner Ratio			65 : 35	
Pound per Gallon				
Part A		lb/gal	9.49	
Part B		lb/gal	7.75	
Blend A & B		lb/gal	8.23	
Working Life @ 25°C		hrs	48	
Substrate				
			Steel	
Film Thickness		mils	1.5	
Dry Time @ 25°C				
Set-to-touch		min.	15	
Tack-free		hrs	5.25	
Paper-free		hrs	12.5	
After 7 Days @ 25°C				
Adhesion, cross-hatch			Excellent	
Impact Resistance		in•lbs	160	

Table 3/ Starting Formulation – Corrosion Resistant Primer

	Method	Units	Value
--	--------	-------	-------

	Method	Units	Value	

Part A

Epoxy Resin (EEW 525), 75% in toluene		pbw	280.0	
MIBK		pbw	80.0	
Xylene		pbw	130.0	
n-Butanol		pbw	36.0	
Barytes		pbw	95.0	
Talc		pbw	95.0	
Zinc phosphate		pbw	142.0	
Red Iron Oxide		pbw	142.0	

Part B

EPIKURE Curing Agent 3115-x-70		pbw	150.0	
Xylene		pbw	112.5	
n-Butanol		pbw	37.5	

(NOTE: Mix components A and B until homogenous. Reduce with 4:1 Xylene : n-Butanol for air spray.)

Pot Life @ 25°C		hrs	24	
Viscosity, #4 Ford Cup		sec	60	
Salt Fog, 5 mil on CRS	ASTM B117	hrs	2,500	

	Method	Units	Value
Rusting rating	ASTM D610		9
Scribe rating	ASTM D1654		7
Degree of Blistering	ASTM D714		9F

Safety, Storage & Handling

Please refer to the MSDS for the most current Safety and Handling information.

Please refer to the Hexion web site for Shelf Life and recommended Storage information.

Exposure to these materials should be minimized and avoided, if feasible, through the observance of proper precautions, use of appropriate engineering controls and proper personal protective clothing and equipment, and adherence to proper handling procedures. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Material Safety Data Sheet (MSDS) for these and all other products being used are understood by all persons who will work with them. Questions and requests for information on Hexion Inc. ("Hexion") products should be directed to your Hexion sales representative, or the nearest Hexion sales office. Information and MSDSs on non-Hexion products should be obtained from the respective manufacturer.

Packaging

Available in bulk and drum quantities.

Contact Information

For product prices, availability, or order placement, please contact customer service:

www.hexion.com/Contacts/

For literature and technical assistance, visit our website at: www.hexion.com