

# Technical Data Sheet

## EPIKOTE™ Resin 872, 872-X-75

### Product Description

EPIKOTE Resin 872, a semi-solid at room temperature, is an epoxy resin, which has been produced from bisphenol A, epichlorohydrin and a flexibilising co-reactant. EPIKOTE 872 is also available as the 75% m/m solution in xylene, EPIKOTE 872-X-75.

### Application Areas/Suggested Uses

EPIKOTE 872 is usually used in admixture with the liquid EPIKOTE resin grades in formulations where improved flexibility and retention of flexibility on ageing are prime requirements. Such formulations are used in solvent-borne amine (or amine adduct) cured coatings. Cured compositions containing EPIKOTE 872 show good resistance to water and many chemicals although this is lower than that of unflexibilised systems.

### Benefits

- Imparts highly flexibility
- Use as sole resin or in admixture
- Imparts good water resistance
- High solids coating application

### Sales Specifications

Property	Unit	Value	Test Method/Standard
EPIKOTE 872			
Epoxy group content	mmol/kg	1465 – 1705	SMS 2026
Viscosity at 25°C**	mPa.s*	1750 - 2750	ASTM D445
Colour**	Gardner	5 max	ASTM D1544
EPIKOTE 872-X-75			
Non volatile content (solvent: xylene)	% m/m	74.0 – 76.0	SMS 1524
Epoxy group content	mmol/kg	1465 – 1705	SMS 2026
Viscosity at 25°C***	mPa.s*	1750 - 2750	ASTM D445
Colour**	Gardner	5 max	ASTM D1544
Appearance	-	Free from dirt	LPM 5037

\* 1 mPa.s = 1 cPoise

\*\* 75% m/m solution in xylene, prepared to SMS 1595

\*\*\* as supplied

### Typical Properties

Property	Unit	Value	Test Method/Standard
EPIKOTE 872			
Epoxy equivalent	g/equivalent*	587 - 683	SMS 2026
Density at 25°C	kg/l	1.07	ASTM D1552

EPIKOTE Resin 872, 872-X-75

<https://www.hexion.com/en-US/product/-archive-epikote-resin-872-872-x-75>

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Density at 25 °C	kg/l	1.01	ASTM D4052
Flash point (PMCC)	°C	>255	ASTM D93
Viscosity			ASTM D445
70°C	Pa.s	40	
80°C	Pa.s	12	
90°C	Pa.s	4.8	
100°C	Pa.s	2.4	
Compatibility of EPIKOTE 872 with other grades of EPIKOTE resin	Ratio EPIKOTE 872 / other grade giving clear films on amine cure		
EPIKOTE 828	Compatible in all proportions		
EPIKOTE 1001	Between 99/1 and 75/25		
EPIKOTE 1002	Between 99/1 and 90/10		
EPIKOTE 1004	Between 99/1 and 95/5		
EPIKOTE 1007	Incompatible in all proportions		
EPIKOTE 872-X-75			
Epoxy equivalent	g/equivalent*	587 - 683	ASTM D1652
Density at 25°C	kg/l	1.01	SMS 1347
Flash point (Abel)	°C	24	IP 170

\* number of grams of resin containing 1 equivalent of epoxide (Weight per equivalent, WPE, is an alternative term).

## Safety, Storage & Handling

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

EPIKOTE Resin 872 and EPIKOTE Resin 872-X-75 should be stored at room temperature in conditions such that moisture is excluded, in the original containers kept tightly closed. Under these conditions the shelf life should be a minimum of three years from date of certification.

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