

# D.E.R. 671-X75

## Epoxy Resin Solution

### Description

D.E.R.\* 671-X75 epoxy resin solution is a solid reaction product of epichlorohydrin and bisphenol-A dissolved in xylene.

### Introduction

D.E.R. 671-X75 resin is a low molecular weight epoxy resin solution formulated with polyamine or polyamide hardeners to form an excellent base for many high quality chemical resistant coatings. These two-pack coating systems are suitable where cure must be achieved at ambient temperature, and where films must withstand exposure to corrosive atmospheres containing a variety of chemical reagents, solvents or salt water. The outstanding resistance properties, hardness, excellent adhesion to almost any substrate and flexibility are utilized in a wide variety of finishes, including marine coatings, tank-linings and industrial maintenance coatings. D.E.R. 671-X75 solid epoxy resin solution can also be used as complementary resin in non-epoxy coating systems to improve resistance properties.

### Typical Applications

This product is suitable for use in applications such as:

- Automotive Coatings
- Can Coatings
- Coil Coatings
- Marine & Protective Coatings
- Civil Engineering

### Safety and Handling

The Dow Chemical Company provides its customers with a product specific Material Safety Data Sheet (MSDS) to cover potential health effects, safe handling, storage, use and disposal information. Dow strongly encourages its customers to review the MSDS on its products and other materials prior to their use. For further

### Typical Properties<sup>1</sup>

Epoxide Equivalent Weight, (g/eq)	425 - 550 <sup>2</sup>	ASTM D-1652
Epoxide Percentage, (%)	7.8 - 10.1 <sup>2</sup>	ASTM D-1652
Epoxide Group Content, (mmol/kg)	1820 - 2350 <sup>2</sup>	ASTM D-1652
Viscosity @ 25°C (77°F), (mPa.s)	6500 - 12000	ASTM D-445
Color, Gardner	2 Max.	ASTM D-1544
Density @ 25°C (77°F), (g/ml)	1.09	ASTM D-4052
Flash Point, °C (°F)	28 (82)	ASTM D-3278
Non-volatile Content, (wt. %)	74 -76	DowM 101188-TE
Solvent	xylene	
Shelf Life, (Months)	24	

<sup>1</sup> Typical properties; not to be construed as specifications

<sup>2</sup> Based on solids

handling information consult the Dow brochure entitled, *DOW Epoxy Resins Product Stewardship Manual, Safe Handling and Storage*, Form No. 296-00312-898.

### Product Stewardship

The Dow Chemical Company has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis of our Product Stewardship philosophy by which we assess the health and environmental information on our products and then take the appropriate steps to protect employee and public health and the environment. The Dow Chemical Company has enduring commitments to Responsible Care<sup>®</sup> in the management of chemicals worldwide. Our Product Stewardship program rests with every individual involved with Dow products from the initial concept and research to the manufacture, sale, distribution, and disposal of each product.

### Customer Notice

Dow encourages its customers and potential users of Dow products to review their applications for such products from the standpoint of human health and environmental quality. To help ensure that Dow products are not used in ways for

which they were not intended or tested, Dow personnel are available to assist customers in dealing with ecological and product safety considerations.

Your Dow sales representative can arrange for the proper contacts. Dow literature, including Material Safety Data Sheets should be consulted prior to the use of Dow products.

### Food Contact Statement

When properly formulated and cured for food contact applications, this resin will comply with the U.S. Food, Drugs and Cosmetics Act as amended under Food Additive Regulation 21 CFR 175.300. This use is subject to good manufacturing practices and limitations specified in each regulation, which should be consulted for complete details.

If your applications include food contact requirements, please contact your Dow representative for further information and forthcoming EC regulations. Also consult the Dow data sheet, *Food Additive Status for Epoxy Resins, Curing Agents and Epoxy Novolac Resins*, Form No. 296-01425.

## Regulatory Status

The base epoxy resin component of this epoxy resin solution is regarded as a polymer according to Council Directive 92/32/EEC of 30 April 1992; the 7th Amendment of Council Directive 67/548/EEC, and is, therefore, exempt from the European Inventory of Existing Chemical Substances (EINECS). In addition, Dow confirms that the chemicals and intentional additives which form the basis of this product are listed on EINECS. The solid epoxy resin is registered under CAS number 25036-25-3; "Phenol, 4,4'-(1-methylethylidene) bis-, polymer with 2,2'-[(1-methylethylidene) bis(4,1-phenyleneoxy-methylene)] bis [oxirane]" { reaction product of bisphenol-A with bisphenol-A diglycidyl ether }. The xylene solvent component (CAS Reg. Nr. 1330-20-7) in this epoxy resin solution is listed on EINECS under the registration number 215-535-7. A major impurity of the xylene solvent is ethylbenzene (EINECS 202-849-4,

## Chemical Inventory List

CAS Number*		
		25036-25-3 / 1330-20-7 (100-41-4)
Europe	EINECS	Polymer / 215-535-7 (202-849-4)
United States	TSCA	25036-25-3 / 1330-20-7 (100-41-4)
Canada	DSL	25036-25-3 / 1330-20-7 (100-41-4)
Australia	AICS	25036-25-3 / 1330-20-7 (100-41-4)
Japan	MITI	7-1283 / 3-3 (3-28)
Korea	KECL	KE-24070 / KE-35427 (KE-13532)
Philippines	PICCS	25036-25-3 / 1330-20-7 (100-41-4)
China	Informal 1997 PRC Inventory	25036-25-3 / 1330-20-7 (100-41-4)

\* Please refer to the Material Safety Data Sheet (MSDS) or SDS for this product to ensure this CAS number is consistent with the product(s) you use.

CAS Nr. 100-41-4). With respect to China, please note that there is currently no formal Chinese Chemical Inventory legislation in place. The Chinese Authorities are in the process of drafting such legislation. There is in place an "Informal 1997 PRC Chemical Inventory List" and the components of D.E.R. 671-X75 resin solution (CAS # 25036-25-3/1330-20-7/100-41-4 ) are listed on it.

For more information on the regulatory status of this product, please refer to the Material Safety Data Sheet (MSDS) or SDS for this product.

### For additional information:

In the U.S. and Canada,  
Contact the Customer Information Group at:  
1-800-441-4369 or 517-832-1426  
Fax: 517-832-1465

In the Pacific,  
Contact the Dow Customer Service Center at:  
81-120-024394 (toll-free in Japan) or  
81-3-5460-2114 (outside Japan)

In Europe, Middle East and Africa,  
Contact the Dow Information Center at:  
++31-20-6916268  
Fax: ++ 31-20-6916418

In Latin America,  
Contact the Dow Chemical Service Center at:  
In Brazil, call 55 11 51889367  
In Mexico, call 95-800-441-4369 (toll-free in Mexico) or  
52-5-2014718 (outside Mexico)  
In Argentina, call 54-11-4390329

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*We don't succeed unless you do.*