

# D.E.R.™ 353

Please use this Technical Data Sheet (TDS) in conjunction with this product's country-specific Safety Data Sheet (SDS) and the Safe Use conditions as described therein. Current Safety Data Sheets can be requested from Olin at info@olinbc.com

### **Description**

D.E.R.™ 353 Liquid Epoxy Resin is a mono-functional reactive diluent modified liquid epoxy resin.

D.E.R. 353 Epoxy Resin is a C12-C14 aliphatic glycidyl ether modified bisphenol A/F based epoxy resin of low viscosity. The performance of D.E.R. 353 Liquid Epoxy Resin in ambient curing coating/flooring formulations is similar to that obtained with D.E.R. 324 Epoxy Resin. The tendency for D.E.R. 353 Epoxy Resin to crystallize, however, is much lower than for D.E.R. 324 Epoxy Resin. The enhanced crystallization resistance caused by the bisphenol A/F epoxy resin blend greatly improves the formulation stability, reduces the handling costs, and makes emptying drums easier. See the Dow technical bulletin, Crystallization of Liquid Epoxy Resins, Form No. 296-01652.

The reactive diluent contained in D.E.R. 353 Epoxy Resin lowers both the viscosity and the surface tension of the resin compound which results in excellent surface wetting and adhesion. Moreover, the reactive diluent used in this resin formulation increases pot life as well as flexibility (impact resistance). Although the diluent reduces the solvent resistance somewhat versus regular unmodified bisphenol A epoxy resins, such as D.E.R.™ 331™ Epoxy Resin, it improves the acid resistance. Compared to other C12-C14 aliphatic glycidyl ether modified epoxy resins such as D.E.R. 324 Epoxy Resin, an improved resistance against solvent has been demonstrated.

A wide variety of curing agents is available to cure this liquid epoxy resin at ambient conditions. Most frequently used are cycloaliphatic polyamines, polyamides, amidoamines, and modified versions of these. These systems are sometimes cured at elevated temperatures to improve selected properties such as chemical resistance and glass transition temperature. If anhydride or catalytic curing agents are employed, elevated temperature and long-post cures are required to develop full end properties

## **Applications**

- Adhesives
- · Building & Civil Engineering
- · Castings / Potting / Encapsulation / Tooling
- · Composites
- · Industrial Coatings: Marine and Protective

Properties	Nominal Value	(English)	Nominal Value	(SI)	Test Method
EEW	190 to 200	g/eq	190 to 200	g/eq	ASTM D1652
Viscosity, absolute (77°F (25°C))	800 to 1000	mPa·s	800 to 1000	mPa·s	ASTM D445
Colour (Max. Gardner)	2		2		ASTM D1544
Density (77°F (25°C))	1.12	g/cm³	1.12	g/cm³	ASTM D4052

#### **Notes**

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

<sup>&</sup>lt;sup>1</sup> Typical properties: these are not to be construed as specifications.

# Product Stewardship

Olin Corporation 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.

Olin encourages its customers and potential users of Olin products to review their applications for such products from the standpoint of human health and environmental quality. To help ensure that Olin products are not used in ways for which they were not intended or tested, Olin personnel are available to assist customers in dealing with ecological and product safety considerations. Your Olin sales representative can arrange for the proper contacts.

# Regulatory Datasheets (RDS)

Olin Corporation provides information on the regulatory status of its products under prominent regulatory programs in the Regulatory Datasheet (RDS). Regulatory Datasheets can be requested from Olin at info@olinbc.com

### **Disclaimer**

Notice: No freedom from any patent or other intellectual property rights owned by Olin or others is to be inferred. Olin assumes no obligation or liability for the information in this document. The information provided herein is presented in good faith and is based on the best of Olin's knowledge, information, and belief. Since use conditions at non-Olin facilities are beyond Olin's control and government requirements may differ from one location to another and may change with time, it is solely the Buyer's responsibility to determine whether Olin's products are appropriate for the Buyer's use, and to assure the Buyer's workplace, use, and disposal practices are in compliance with applicable government requirements. Consequently, Olin assumes no obligation or liability for use of these materials and makes no warranty, express or implied. The user of the information provided is solely responsible for compliance with any applicable government requirements. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

# Contact Information

USA: 1-844-238-3445 1-877-304-4442 Canada: China: 86-4008859485 France: 33-176361145 Germany: 49-41417693000 Hong Kong: 852-58081886 81-345406770 39-0694805761 Italy: Japan: Latin America: 55-1151884105 Russia: 7-4996092327 Singapore: 65-31632006 South Korea: 82-260221296 United Kingdom: 44-8000869047

www.OlinEpoxy.com

