

## Product information

# EPODIL<sup>®</sup> 794

## Reactive Diluent

### DESCRIPTION

Epodil 794 reactive diluent is a difunctional reactive diluent for epoxy systems. Epodil 794 is resorcinol diglycidyl ether. Epodil 794 has excellent compatibility with the epoxy System and very good retention of properties. Epodil 794 may crystallize at room temperature but will return to its normal clarity after warming to 100-140°F for approximately 1 hour.

### TYPICAL PROPERTIES

Property	Value	Unit
Color	n/a	APHA
Viscosity @ 104°F	50-610	cP
Specific Gravity @ 104°F	1.21	
Flash Point (Setaflash)	>200	°F
Hydrolyzable Chloride	max 0.3	
Residual Epichlorohydrin	max 200	ppm
Weight per Gallon	10.09	lb/gal
Moisture Content	max 1.0	%
Equivalent Wt{H}	118-133	
Recommended Use Level (EEW=190)	See Table	phr

### ADVANTAGES

- Highly compatible with epoxy
- Minimal impact on flexibility
- Minimal impact on cure speed and gel time

### APPLICATIONS

- Electrical potting and encapsulation
- Flooring
- Industrial coatings

## SHELF LIFE

At least 36 months from the date of manufacture in the original sealed container at ambient temperature. Store away from excessive heat and humidity in tightly closed containers.

## STORAGE AND HANDLING

Refer to the Safety Data Sheet for Epodil 794 reactive diluent.

## SUPPLEMENTARY DATA

Weight Percent Epodil 794 (%)	Viscosity @ 77°F (cP)
Epodil 794 reactive diluent can be used as follows to lower the viscosity of a standard Bisphenol-A liquid epoxy resin (EEW=190) with an initial viscosity of 13,700 cP:	
5	10,000
10	7,750
15	5,750
20	4,350

## EXAMPLE IMPACT OF DILUENT ON A SIMPLE FORMULATED SYSTEM

Evonik recommends that the formulator test reactive diluents in their system for performance. The following data is provided as an example of the impact of the reactive diluent on a simple formulated system.

### SYSTEM:

- BADGE with 12.5 wt% Epodil 794
- Cured with Ancamine<sup>®</sup> 1618 curing agent at 1:1 stoichiometry

Property	Without Epodil 794	With Epodil 794
Persoz hardness <sup>2</sup> at 23°C (1 day/7day)	195/310	169/310
Phase 3 dry time <sup>3</sup> (h)	7:10	7:55
Tg <sup>4</sup> (1st scan)	51	51
Gel time <sup>5</sup> (min)	55	47

(2) BYK Persoz pendulum tester according to ISO 1522 with 10 mil WFT at 23°C/50% RH

(3) 6 mil WFT BK Drying time recorder according to ASTM D5895 with 6 mil WFT at 23°C/50% RH

(4) TA Instruments DSC model Q200 first scan data

(5) 150g mix using TECHNE Gel-timer

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