

Product information

EPODIL[®] 761

Reactive Diluent

DESCRIPTION

Epodil 761 reactive diluent is an aromatic mono-functional diluent of p-tertiary butyl phenol. It provides excellent compatibility with epoxy resins and good retention of physical properties. Epodil 761 is often used in flooring, coatings, and mortar applications.

TYPICAL PROPERTIES

Property	Value	Unit
Color	≤ 2	Gardner
Viscosity @ 77°F	17-30	cP
Specific Gravity @ 77°F	1.03	°F
Flash Point (Setaflash)	216	°F
Hydrolyzable Chloride	max 0.5	
Residual Epichlorohydrin	200	ppm
Weight per Gallon	8.59	lb/gal
Moisture Content	max 0.1	%
Equivalent Wt/{H}	224	
Recommended Use Level (EEW=190)	See Table	phr

ADVANTAGES

- Minimal impact on gel time
- Maintains Tg and compressive strength

APPLICATIONS

- Flooring, mortars and grouts
- 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 761 reactive diluent.

SUPPLEMENTARY DATA

Weight Percent Epodil 761 (%)	Viscosity @ 77°F (cP)
Epodil 761 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	9,220
10	5,750
15	3,840
20	2,940

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 761
- Cured with Ancamine[®] 1618 curing agent at 1:1 stoichiometry

Property	Without Epodil 761	With Epodil 761
Persoz hardness ² at 23°C (1 day/7day)	195/310	139/315
Phase 3 dry time ³ (h)	7:10	9:55
Tg ⁴ (1st scan)	51	51
Gel time ⁵ (min)	55	56

(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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