

EPODIL® REACTIVE DILUENTS

Reactive diluents include mono-, di- and multifunctional glycidyl ethers which can be used to reduce viscosity of typical epoxy resins without causing significant changes in the final physical properties of the cured epoxy thermoset system. Typical product properties are shown below.

	Product	Chemical Name	Color ¹ (Gardner)	Viscosity ² (CPs@ 77°F/25°C)	EEW ³	Specific Gravity (77°F/25°C)	Comments
MONO-FUNCTIONAL	Epodil 741	n-Butyl Glycidyl Ether	1	≤3	145-155	0.91	Excellent viscosity reduction with retention of properties. High vapor pressure
	Epodil 741HP	n-Butyl Glycidyl Ether	60APHA	≤2	130-133	0.93	High purity version (essay 98%)
	Epodil 742	Cresyl Glycidyl Ether	2	≤25	167-195	1.08	Good chemical resistance, good maintenance of physical properties. Low volatility. Moisture tolerant.
	Epodil 746	2-Ethyl Hexyl Glycidyl Ether	1	2-15	215-230	0.91	Lower volatility than Epodil 741
	Epodil 747	Alkyl (C ₈ -C ₁₀) Glycidyl Ether	1	3-15	220-235	0.90	High dilution efficiency; higher vapor pressure than Epodil 748
	Epodil 748	Alkyl (C ₁₂ -C ₁₄) Glycidyl Ether	1	5-20	275-300	0.89	Industry standard reactive diluent. Imparts a degree of flexibility aiding adhesion to poorly prepared substrates
	Epodil 748HP	Alkyl (C ₁₂ -C ₁₄) Glycidyl Ether	30 APHA	2-10	257-285	0.89	High purity version Epodil 748
	Epodil 759	Alkyl (C ₁₂ -C ₁₃) Glycidyl Ether	1	≤8	275-290	0.89	Alternative for Epodil 748
	Epodil 761	p-Tertiary Butyl Phenol Glycidyl Ether	2	17-30	212-235	1.03	Excellent compatibility with epoxy resin. Retention of physical properties
	Epodil 781	Neodecanoic Acid Glycidyl Ester	35 APHA	2-8	240-260	0.95	Performance alternative for Epodil 748
DI-FUNCTIONAL	Epodil 749	Neopentyl Glycol Diglycidyl Ether	1	10-25	130-145	1.07	Low volatility combined with retention of physical properties and good wetting
	Epodil 750	1,4-Butanediol Diglycidyl Ether	1	10-18	122-135	1.11	Offers favorable combination of high dilution efficiency, retention of mechanical property and low volatility
	Epodil 757	Cyclohexane Dimethylol Diglycidyl Ether	2	45-75	145-168	1.10	Imparts excellent maintenance of physical properties for use in high demanding applications
	Epodil 777	Propylene Glycol Diglycidyl Ether	60 APHA	25-45	294-333	1.05	Excellent wetting properties and imparts a degree of flexibility of epoxy system
	Epodil 794*	Resorcinol Diglycidyl Ether	-	50-160@ 140°F/40°C	118-133	1.21@ 140°F/40°C	Combines excellent compatibility with retention of physical properties
MULTI-FUNCTIONAL	Epodil 733	Glycerol Triglycidyl Ether	60 APHA	200-300	143-154	1.24	Provides high cross-linking density and physical property enhancement
	Epodil 762	Trimethylol Propane Triglycidyl Ether	60 APHA	90-180	135-147	1.17	Alternative for Epodil 733

*Epodil® 794 may crystallize at room temperature storage, resulting in turbidity, haziness or phase separation. If this occurs, product should be warmed to 100-140 °F (38-60 °C) for approximately one hour until clear. Stirring while warming the product will expedite the clarification process, but is not required to re-establish product clarity.

¹ ASTM D1544

² Brookfield viscosity, ASTM D445

³ EEW = Epoxy Equivalent Weight

HANDLING PRECAUTIONS

Refer to the appropriate Safety Data Sheet.

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