

Technical Data Sheet

Most recent revision date: December 2015

EPI-REZ™ Resin 7510-W-60

Product Description

EPI-REZ Resin 7510-W-60 is a moderate viscosity, non-ionic, aqueous dispersion of a bisphenol A epoxy resin. EPI-REZ Resin 7510-W-60 is supplied at typically 60 percent non-volatiles and is mechanically stable. No organic solvents are present.

Application Areas/Suggested Uses

EPI-REZ Resin 7510-W-60 offers a solvent-free approach to the formulation of for example:

- Industrial textile binders of fibre finishes
- Adhesives
- Coatings and electrical dip coatings
- Varnishes.

It can also be incorporated into formulations which are traditionally water-based and which require good strength and outstanding chemical or water resistance. EPI-REZ Resin 7510-W-60 is used to modify polymer lattices, especially those containing sufficient amine or carboxyl functionality to react with available epoxy groups.

EPI-REZ Resin 7510-W-60 can be cured with many of the same curing agents that are used with liquid or solution epoxy resins. Curing agents most conveniently employed are those which are water soluble or dispersible and which are stable in an aqueous medium. Examples of such curing agents include dicyandiamide, substituted imidazoles, aliphatic and aromatic amines and various EPIKURE™ Curing agents.

When applied at room temperature, EPI-REZ Resin 7510-W-60 coalesces to form a clear, continuous, tacky film after evaporation of the water.

Benefits

- High epoxy functionality
- Water reducible, providing wide latitude for viscosity reduction
- Imparts good chemical and water resistance properties
- Compatible with most synthetic polymer lattices
- Curable with most water soluble curing agents

Sales Specification

Property	Unit	Value	Test Method/Standard
Epoxy group content	mmol/kg	4650 - 5400	ASTM D1652
Viscosity at 25°C*	mPa.s	500 - 5000	ASTM D2196
pH		2.0 - 5.0	ASTM E70
Solids	% m/m	60.0 - 62.0	ASTM D1259
Particle size Cl,Dv (vol mean)	µm	1.0 - 2.2	SRC-1

* Brookfield, spindle 5 at 20 rpm

Typical Properties

Property	Unit	Value	Test Method/Standard
Epoxy equivalent	g/eq*	185 - 215	ASTM D1652
Density at 25°C	kg/l	1.079	ASTM D4052
Solvent		water	

* Number of grams of resin containing 1 equivalent of epoxide (Weight per equivalent, WPE, is an alternative term)

Safety, Storage & Handling

Please refer to the MSDS for the most current Safety and Handling information.

EPI-REZ Resin 7510-W-60 should be stored in tightly sealed containers in a dry location at temperatures between 10 and 38°C. Under these conditions the shelf life should be a minimum of 18 months from date of certification. Elevated temperatures or freezing conditions will accelerate particle settling which will require re-dispersion with moderate agitation. Do not allow the product to freeze.

Form Number

EPI-REZ Resin 7510-W-60