

# Product Bulletin

## Coatings

Closing the Cost/  
Performance Gap in  
High Performance  
Waterborne Epoxies

### EPI-REZ™ Resin 7520-WD-52



**Hexion Inc. (Hexion) introduces its latest development in high performance Waterborne Epoxy Resins. EPI-REZ Resin 7520-WD-52 has been developed using proprietary technology to provide excellent performance in high end applications where good substrate adhesion and high corrosion resistance are required at lower VOC levels. EPI-REZ Resin 7520-WD-52 also offers improved product storage stability compared to other Waterborne Epoxy Resins.**

EPI-REZ Resin 7520-WD-52 is a 52% weight solids, waterborne dispersion of a type-1 Bisphenol-A solid epoxy resin. It is an excellent candidate resin for providing the high performance required for epoxy protective coatings on metal or concrete substrates. Used in combination with EPIKURE™ Curing Agent 6870-W-53, this epoxy system delivers excellent performance in higher demanding VOC compliant applications.

#### Sales Specifications

	Unit	Value	Test Method / Standard
Weight per Epoxide <sup>1</sup>	g/eq	475 - 575	ASTM D-1652
Epoxy Group Content <sup>1</sup>	mmol/kg	1740 - 2105	ASTM D-1652
Viscosity <sup>2</sup> at 25 °C	cP	1000 - 6000	ASTM D-2196
Solids content	%	51.0 – 54.0	ASTM D-1259

<sup>1</sup> based on resin solids  
<sup>2</sup> Brookfield, spindle 5 at 20 rpm

#### Applications

- Formulation of high performance metal primers for ACE, marine and protective markets
- OEM transportation (truck/bus, trains, etc)
- Industrial Maintenance coatings
- General industrial finishes (shop-based)
- Anti-corrosive primers and mid coats

#### Benefits

- Improved price/performance ratio
- Longer shelf life (>12 months)
- Superior corrosion- and water- resistance
- Excellent substrate adhesion
- Fast dry and recoat times
- Lower VOC formula (<100 g/L) and lower odor
- No induction time (mix and use)
- Shear stable (more easily disperses pigment)

Performance of a white primer based on EPI-REZ Resin 7520-WD-52 cured with EPIKURE Curing Agent 6870-W-53. The coating was applied to ~70 microns on smooth Gardobond\* OC steel. The panel was force-cured for 20 minutes at 70 °C and then one week at room temperature. The resultant paint panels were exposed to salt spray testing and continuous condensation for 500 hours. The photos after exposure demonstrate the superior corrosion resistance, water resistance and adhesion to this difficult substrate.



500 hours salt spray testing

500 hours continuous condensation



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