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# Technical Data Sheet: Poly bd® R-45HTLO

# HYDROXY TERMINATED POLYBUTADIENE RESIN

$$HO$$
 $0.6$ 
 $0.2$ 
 $0.2$ 
 $0.2$ 
 $0.2$ 
 $0.2$ 

#### **DESCRIPTION**

Poly bd® R-45HTLO resin is a liquid hydroxyl terminated polymer of butadiene. Poly bd® resins have primary allylic alcohol groups that exhibit high reactivity in either condensation polymerization reactions or the preparation of derivatives

#### **PRODUCT HIGHLIGHTS**

Hydrophobicity
Reactive hyroxyl groups
Low glass transition temperature
Miscibility with asphalt
Low color - high clarity

#### PERFORMANCE PROPERTIES

Hydrolytic stability
Low temperature flexibility
Low moisture permeability
Resistance to aqueous acids and bases
Excellent adhesion to a variety of substrates
Electrical insulative properties

### SUGGESTED APPLICATIONS

Potting and encapsulation Adhesives, Sealants Polymer Modification Binders, Waterproof coatings and membranes Polyurethanes

# Poly bd<sup>®</sup> R-45HTLO TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

Non-Volatile Material, wt,% Viscosity, mPa.s @ 23 °C Viscosity, mPa.s @ 30 °C Hydroxyl Number, mg KOH/g Hydroxyl Value, meq/g Hydroxyl Functionality Molecular Weight, Mn Polydispersity, Mw/Mn Water, wt.% Specific Gravity @ 23 °C	99.9 8000 5000 47.1 0.84 2.4-2.6 2800 2.5 0.02 0.901 400
Iodine Number, g/100 g Glass Transition Temperature, °C	-75
Solubility in g/100 ml. Solvent @ 23 °C	-73
Mineral Spirits	>50
Toluene	>50 >50
Chloroform	>50
Methyl Ethyl Ketone	>50
Ethyl Acetate	>50
Acetone	<10 <sup>(1)</sup>
Hexane	>50
Aromatic 100	>50
Isopropanol	<10 <sup>(1)</sup>

(1) Cloudy: 5% solution also cloudy

## **Regulatory Notice**

Poly bd<sup>®</sup> R-45HTLO is regulated by the United States Department of Commerce and may not be exported without license from that organization.

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