

# Plastopal<sup>®</sup> EBS 400 I

<b>Product Description</b>	Plastopal EBS 400 I is a urea-formaldehyde resin solution for baking finishes, acid-cured finishes and nitrocellulose lacquers.
<b>Key Features &amp; Benefits</b>	- good general use for urea-formaldehyde resins - medium reactivity - compatible in many industrial coating formulations
<b>Chemical Composition</b>	Urea-formaldehyde resin etherified with isobutanol, dissolved in isobutanol

## Properties

<b>Typical Properties</b>	Appearance		resin solution
	Non-volatile matter	%	~ 62
	Acid value	mg KOH/g	≤ 3
	Viscosity at 23°C	cps	~ 1400 – 1700
	Shear rate D	s <sup>-1</sup>	82.6
	Platinum-cobalt color number		≤ 50
	Density	g/cm <sup>3</sup>	1.00
	Free formaldehyde	%	≤ 1.0
	Organic solvent	%	≤ 35

**Dilutability** Dilutable in alcohols, esters, glycol ethers, glycolether acetates, aromatic hydrocarbons, methyl ethyl ketone, turpentine oil, and white spirit; insoluble in water.

**Compatibility (1:1, solids on solids)** Compatible with non-drying alkyd resins, acrylic resins, and nitrocellulose; limited compatibility with alkyd resin with drying fatty acids, melamine-formaldehyde resins, and saturated polyester resins; incompatible with dispersions.

*These typical values should not be interpreted as specifications.  
Dilutability and compatibility should be tested for each individual combination.*

## Applications

Plastopal EBS 400 I is used in baking and acid-curable finishes. It can also be used to formulate nitrocellulose coatings where it suppresses yellowing and imparts gloss.

Plastopal EBS 400 I is recommended for applications such as:

- Industrial baking enamels
- Nitrocellulose lacquers
- Conversion varnishes

**Processing** To ensure good film properties in acid-curable and baking finishes, Plastopal EBS 400 I should be plasticized with alkyd resins (preferably short to medium, non-drying, or semi-drying oil alkyds) or other resins.

The alkyd resin should be carefully chosen because its type and proportion greatly influence the physical properties. The ratio of alkyd resin to Plastopal EBS 400 I between 8:2 – 6:4 for baking finishes and 7:3 - 5:5 for acid-curable finishes, depending" on the type of alkyd and its intended application.

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## **Safety**

### **General**

The usual safety precautions when handling chemicals must be observed. These include the measures described in Federal, State, and Local health and safety regulations, thorough ventilation of the workplace, good skin care practices, and wearing of protective goggles.

### **Safety Data Sheet**

All safety information is provided in the Safety Data Sheet for Plastopal EBS 400 I.

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## **Storage**

Please refer to the "Handling and Storage of Polymer Dispersion" brochure

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