

**PARALOID™ B-72 100%**  
**Solid Grade Thermoplastic Acrylic Resin**

**Description**

PARALOID B-72 general-purpose thermoplastic acrylic resin is similar to PARALOID B-66 acrylic resin but capable of forming softer films. The approximate hardness (KHN) is 10-11 compared to 12-13 for PARALOID B-66 resin.

PARALOID B-72 acrylic resin is unique in possessing a high tolerance for ethanol. The property allows its use in applications not tolerant of strong solvents. The alcohol dispersions may be cloudy or milky. However, they form clear, coherent films.

PARALOID B-72 has low reactivity with sensitive phosphorescent and luminescent pigments to produce stable, durable, non-yellowing coatings. It is compatible with vinyls, cellulose, chlorinated rubbers, and silicones. It is well suited for white and metallic aerosols, clear coatings for wood, nitrocellulose modified coatings for general product finishing, pigment dispersion (fluorescent), flexographic printing inks, and gravure plastic coatings.

**Solubility**

Information about the solvent compatibility of PARALOID B-72 acrylic resin can be found in Rohm and Haas brochure **82A114—PARALOID Solid Grade Resins, Solvent Selection Chart**.

**Typical Properties**

These properties are typical but do not constitute specifications.

Physical Form	Pellets
Bulk Density, 25°C, lb/gal	9.6
Solubility Parameter	9.3
Tg (°C)	40
Ultimate Hardness of Clear Films, KHN	10 to 11
Chemical Composition	EMA Copolymer

**Properties in White Lacquers<sup>1</sup>**

Tukon Hardness	Whiteness	Cross Hatch <sup>3</sup>
30 min. at 180°F 2.9	(K color low numbers best)	30 min. at 180°F 0
30 min. at 300°F 12.1	30 min. at 300°F 7.7	30 min. at 300°F 0
	16 hrs. at 350°F 11.8	
Pencil Hardness	Flexibility <sup>2</sup> , 1/8, 1/4, 1/2	Mustard Staining
30 min. at 180°F H	inch mandrels	(30 minute exposure)
30 min. at 300°F H	30 min. at 180°F 0, 0, 0	30 min. at 180°F Light
	30 min. at 300°F 4, 3, 2	30 min. at 300°F Light
Gloss, 20°	Printing, 2 psi for	Gasoline Resistance
30 min. at 180°F 77	1 hour at 140°F	(15 minute exposure)
30 min. at 300°F 76	30 min. at 180°F V. Heavy	30 min. at 180°F Wipes Off
	30 min. at 300°F Moderate	30 min. at 300°F Wipes Off
Gloss, 60°	Knife Adhesion	Spray Conditions
30 min. at 180°F 93	30 min. at 180°F Very Good	Viscosity, No. 4 Ford Cup, sec. 15
30 min. at 300°F 92	30 min. at 300°F Very Good	Solids Content, % 25.0

**Note:** Drying the coatings at 300°F for 30 minutes simulates final properties of the resin.

<sup>1</sup>The white lacquers were formulated at a titanium dioxide/binder ratio (solids basis) of 30/70. The properties were determined after coatings were sprayed on Bonderite 1000.

<sup>2</sup>The degree of cracking at the bend over each mandrel is rated on a 0 (no failure) to 10 (complete flaking) scale.

<sup>3</sup>The degree of flaking at the scribed cross hatch is rated on a 0 (no failure) to 5 (complete lift off) scale.

### Additional Information

PARALOID B-65 is supplied in a powder form that is easily dissolved in aromatic hydrocarbons as well as a variety of esters and ketones.

The product detailed in this bulletin is supplied from our manufacturing facility in Louisville, Kentucky, USA with conformance to the requirements of ISO 9002 or to local equivalent quality protocols ensures consistently high standards, immaterial of the source, although the pack size and method of packaging may differ.

This product is available in Asia Pacific through Wilbur Ellis Co./Connell Bros. Co.

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