



## PARALOID™ B-64 Solid Grade Thermoplastic Acrylic Resin

### Product Description

PARALOID B-64 solid grade acrylic resin provides an outstanding combination of hardness, flexibility, and adhesion to various substrates. This general-purpose resin permits wider latitude in formulating in solvents that are suitable for specific applications. It has superior exterior durability, greater flexibility and resistance properties than PARALOID B-66. The hardness of PARALOID B-64 is similar to that of PARALOID B-66 and slightly softer than that of PARALOID A-11.

PARALOID B-64 acrylic resin can be dissolved in toluene, xylene, selected esters, acetone, and methyl ethyl ketone. PARALOID B-64 is not soluble in most alcohols and aliphatic hydrocarbons as the sole solvent. Please contact your sales person for additional information about the solvent compatibility of PARALOID B-64. It is well suited for a variety of applications, including treated metal, copper, zinc, brass, treated aluminum, concrete floors, and certain plastics.

PARALOID B-64 is particularly suited for clear coating of interior and exterior concrete floors and driveways. Unlike conventional curing membranes which are regarded as temporary coatings, clear coats of PARALOID B-64 exhibit excellent wear characteristics, moderate gasoline and oil resistance, and proven hot tire resistance. The coating is normally applied as a 15-20% solution in solvents such as xylene or butyl acetate.

### Typical Properties

These properties are typical but do not constitute specifications.

Physical Form	Powder
Chemical Composition	MMA/BMA Copolymer
Tg, °C	60
Bulk Density, 25°C, lb/gal	9.8
Solubility Parameter	9.4
Ultimate Hardness of Clear Films, KHN	15 to 16

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

Tukon Hardness		Whiteness		Cross Hatch <sup>3</sup>	
30 min. at 180°F	6.9	(K color low numbers best)		(30 minute exposure)	
30 min. at 300°F	18.2	30 min. at 300°F	3.8	30 min. at 180°F	0
		16 hrs. at 350°F	4.8	30 min. at 300°F	0
Pencil Hardness		Flexibility <sup>2</sup> , 1/8, 1/4,		Mustard Staining	
30 min. at 180°F	2H	1/2 inch mandrels		(30 minute exposure)	
30 min. at 300°F	5H	30 min. at 180°F	3, 3, 2	30 min. at 180°F	None
		30 min. at 300°F	2, 2, 1	30 min. at 300°F	None
Gloss, 20°		Printing, 2 psi for		Gasoline Resistance	
30 min. at 180°F	74	1 hour at 140°F		(15 minute exposure)	
30 min. at 300°F	80	30 min. at 180°F	Moderate	30 min. at 180°F	OK
		30 min. at 300°F	Trace	30 min. at 300°F	OK
Gloss 60°		Knife Adhesion		Spray Conditions	
30 min. at 180°F	93	30 min. at 180°F	Excellent	Viscosity, No. 4 Ford	
30 min. at 300°F	95	30 min. at 300°F	Excellent	Cup, sec.	15
				Solids Content, %	24.0

**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.

### Concrete

PARALOID	Hardness	Flexibility	Exterior Durability	Impact	Water Resist	Solvent Resist
B-44	8	7	8	5	6	3
B-48N	8	7	9	6	5	2
B-64	8	7	8	5	7	3
B-66 100%	7	3	5	2	8	2
B-67 100%	7	3	5	3	10	2
B-82 100%	6	6	1	6	6	2

#### Concrete Substrates:

- |  |                                 |
|--|---------------------------------|
| 1. Concrete Floors, interior           | PARALOID B-66, B-44, B-67, B-64 |
| 2. Concrete Walls, interior            | PARALOID B-82; B-66             |
| 3. Exterior Concrete (Driveway, Patio) | PARALOID B-64, B-44             |

To improve gasoline resistance                      Blend with "A" series

## Safe Handling Information

Dow Material Safety Data Sheets (MSDS) contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products.

Under the OSHA Hazard Communication Standard, workers must have access to and understand MSDS on all hazardous substances to which they are exposed. Thus, it is important that you provide appropriate training and information to your employees and make sure they have available to them MSDS on any hazardous products in their workplace.

The Dow Chemical Company sends MSDS on non-OSHA-hazardous as well as OSHA-hazardous products to its customers upon initial shipment, (including samples). If you do not have access to one of these MSDS, please contact your local Dow representative for a copy. Updated MSDS are sent upon revision to all customers of record. In addition, MSDS are sent annually to all customers receiving products deemed hazardous under the Superfund Amendments and Reauthorization Act. MSDS should be obtained from your suppliers of other materials recommended in this bulletin.

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