

67460 Paraloid™ B-44 Solid Grade Thermoplastic Acrylic Resin

Summary

Paraloid™ B-44 solid grade acrylic resin provides an outstanding combination of hardness, flexibility, and adhesion to various substrates. It also permits wider latitude in formulating in solvents that are suitable for specific applications. The resin is slightly softer and more flexible than Paraloid™ A-21 and has excellent adhesion to various substrates.

Paraloid™ B-44 can be dissolved in aromatic hydrocarbons, esters and ketones but is only partially soluble in solvents such as alcohols and aliphatic hydrocarbons. It is well suited for a variety of applications, including treated metal, copper, zinc, brass, treated aluminum, concrete floors and certain plastics.

Physical Properties (Not to be used as specifications)

Appearance	Pale yellow transparent bead
Tg	60°C
Density	1.18 g/cm ³
Chemical composition	MMA Copolymer
Solubility parameter	9.4
Ultimate hardness of clear films	15 - 16

Solubility of PARALOID™ -Acrylic Thermoplastic Resins

(Values given are Viscosity, cps, at 25°C of a 40% solids solution, except as noted)

Solvents	PARALOID™ Types				
	B-44 No. 67460	B-66 No. 67480	B-67 No. 67420	B-72 No. 67400	B-82 No. 67440
Alcohols					
2B Alcohol	- ^c	- ^c	- ^c	Dc	PS ^{cd}
Isopropanol	-	-	2 800	-	-
n-Butanol	-	94 ^e	2 500	130 ^e	-
Isobutanol	-	5 600 ^{fg}	3 200	-	-
n-Amyl alcohol	-	-	3 200	-	-
Diacetone alcohol	10 000	6 200	2 300	3 500	3 000
Chlorinated Hydrocarbons					
Methylene chloride	2 700	850	520	960	1 200
Carbon tetrachloride	860 ^g	280 ^e	20 000	280 ^e	6 000 ^f
Ethylene dichloride	5 500	1 200	640	1 300	1 800
Trichloroethylene	12 000	7 200	2 100	4 800	3 400
Esters					
Ethyl acetate	1 800	940	240	500	610
n-Propyl acetate	1 800	570	180	550 ^g	580
n-Butyl acetate	2 600	875	250	700	630
Isobutyl acetate	3 100	960	240	660 ^g	700
Amyl acetate	5 600	1 110	320	850	980
1-Ethyl hexyl acetate	-	6 900	770	-	-
Ethers					
Dioxane	5 600	880	830	1 300	1 700

- c. Code for used letters: - = Insoluble; D = Dispersed; PS = Partially soluble
- d. Results when using pure 2B alcohol. Paraloid™ B-82 is soluble in different alcohol/water-mixtures.
- e. Viscosity determined at 20 % solids.
- f. Viscosity determined at 30 % solids.
- g. Hazy solution.