Technical Information

Raw Material I HVB - 0005 PVB Resin (Hipol 18 LV)

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POLYVINYL BUTYRAL RESIN (HIPOL)

Introduction

PVB Resin 18 LV is a low viscosity grade of Polyvinyl Butyral Resin. PVB Resin 18 LV is latest addition to the standards of Hipol resins offered for Printing Inks, Paints, Coatings, Adhesives and Ceramics.

Properties

Sr. No.	Test	Results
1.	Physical Appearance	White Fluffy Powder
2.	Viscosity in Sec @ 30°C	48 - 58
	(20% solution in Ethanol in FCB4)	
3.	Volatile Content (% w/w Max.)	2
4.	Acid Value (MG KOH / GM)	1.0 Max

General Properties

PVB Resin 18 LV -

- offers excellent adhesion to metals, plastics, glass, ceramics, wood, concentrate, leather etc. Having very large surface area combined with low molecular weight, product undergoes into solution under mild agitation in a very short time to offer clear transparent solution with minimum loss of solvent
- is soluble in low cost environment friendly solvents like Alcohols, Glycol Ethers & has ability to accept Ester, Ketones etc
- offers excellent film formation property. Film being clear, transparent, odour free & tasteless
- offers excellent pigment wetting in non-aqueous medium
- offers excellent compatibility with other film forming resins like Nitrocellulose, Epoxy Alkyds, Phenolic Resins etc
- has free hydroxyl groups that are chemically reactive & undergo reactions with Phenolic, Epoxy Resins, Isocyanates, Melamine, Aldehyde Resins etc.
- being lowest molecular weight resin in this product groups offers excellent flexibility. It also shows good adhesion resistance, heat resistance, resistance to water and wide range of other chemicals
- is a thermoplastic resin with low softening temperature & hence shows good heat sealing properties. Thermoplasticity can be reduced or eliminated completely by cross linking reaction involving free hydroxyl groups

Applications

- PVB Resin 18 LV is an ideal choice where high solid & with low viscosity is the basic requirement. PVB Resin 18 LV finds applications in following areas :

- PVB Resin 18 LV with its unique combination of physical and chemical characteristics is an ideal binder for flexographic / gravure printing inks for surface printing as well as lamination applications in flexible packaging involving substrates like Polyester, BOPP, Polyethylene, PVDC coated PP, Acrylic Coated PP, Cellulose Acetate, Cellophane, Polystyrene and Polyamide films
- PVB Resin 18 LV is an ideal binder for production of pigment chips, thermal transfer printing inks, varnishes etc

Printing Inks

PVB Resin 18 LV offers good water resistance coupled with good blocking resistance, good flow and excellent pigment wetting properties, hence is ideal for formulation of gravure and flexographic printing inks.

Heat-Sealing Lacquers

PVB Resin 18 LV with low softening temperature offers lower sealing temperature. However further reduction in sealing temperature could be achieved by incorporation of plasticizer and heat sealing temperate could be increased by incorporating Nitrocellulose.

Two-Pack Paints

Low molecular weight, high functionality because of free hydroxyl groups helps use of PVB Resin 18 LV formulation on non yellowing stoving finishes for metals and metal foils. Crosslinking could be achieved with resins like Phenolic, Melamine, Urea etc. Coating formulations curing at room temperature are obtained by combining PVB Resin 18 LV with Urea Resins using mild solvents. Cured coatings show water and alcohol resistance and bear high mechanical stresses and find application as floor sealers for indoor and outdoor application.

Available Packing

10 Kg HDPE Laminated Paper Bag.

Shelf Life

1 year from the date of manufacture provided it is kept in a dry and well ventilated place at ambient temperature.