SPECIFICATION DATA SHEET
PVB RESIN

Melting point	165-185°C
density	1.08
refractive index	1.485
form	Free-Flowing Powder
color	White
Water Solubility	insoluble
Stability:	Stable. Combustible. Dust may form explosive mixture with air. Incompatible with strong oxidizing agents.
CAS DataBase Reference	63148-65-2(CAS DataBase Reference)
HS Code	39059990
EPA Substance Registry System	Vinyl acetal polymers, butyrals(63148-65-2)

CAS:	63148-65-2
MF:	C16H28O5
MW:	0
EINECS:	272-808-3

Specification:

project / indicator / grade	appearance	Granularity %	volatile %	viscosity	PVB %	transparency 660 μm	transparency 430 μm	Free acid HCL %	ash %
SD-0	white granules or powder	>99	≤3	≤5	68-80	>90	>80	≤0.05	≤0.05
SD-1		>99	≤3	5-10	68-80	>90	>80	≤0.05	≤0.05
SD-2		>99	≤3	10-18	68-80	>90	>80	≤0.05	≤0.05
SD-3		>99	≤3	18-30	69-80	>90	>80	≤0.05	≤0.05
SD-4		>99	≤3	30-60	70-80	>90	>80	≤0.05	≤0.05
SD-5		>99	≤3	60-180	70-80	>90	>80	≤0.05	≤0.05
SD-6		>99	≤3	>180	70-85	>90	>80	≤0.05	≤0.05

Application:

1. Transparent material: PVB has special bonding and high transparency to inorganic and organic glass. It can be used as a sandwich material for safety glass. Safety glass made of PVB as a sandwich has been widely used. The windshield of cars and airplanes. Because the safety glass made of PVB as the interlayer has strong impact resistance, high transparency, water resistance, aging resistance, and can be used in an environment of minus 60 ° C, in addition to the use of plexiglass as a transparent material. product.

2. Coating: Because PVB has the characteristics of high bonding strength, cold resistance, oil resistance, wear resistance and corrosion resistance, it is widely used in:

(1) Wood coating: surface treatment agent for plywood and primer for hard board and insulating board.

(2) Metallic coating: Used in combination with other natural resins, synthetic resins, and drying oils to improve the impact resistance, flexibility, and adhesion of thermosetting resins.

(3) Metal bottom knee: PVB has strong adhesion to metal and has good adhesion to surface coatings, so it can be used as a primer for metal materials such as steel, aluminum, galvanized, iron and copper. It has been widely used in marine vessels, submarines, submersibles for seaplanes, coatings for drilling derricks, bridges, electrical appliances, etc., immersed in water.

(4) Metal ink: It is mixed with nitrocellulose, maleic acid resin, etc., and is used as a metal ink for an aluminum plate or a copper plate.

(5) Coating of metal box: Applying PVB solution on metal foil (mainly aluminum foil) can improve the strength and moisture resistance of the foil, and can be completely wrapped with heat only for packaging chocolate, biscuits and other foods. And automatic packaging of medicines, photographic parts, etc.

(6) Coating for vacuum evaporation: PVB alcohol solution can adhere well to plastic surface and paper metal surface, so it can be used as vacuum evaporation, such as adhesive for vacuum aluminum plating and coating for processing surface. .

(7) Concrete coating: When the PVB solution is used as the primer, the durability of the water emulsion paint film can be improved.

(8) Waterproof coating: As a waterproof paint for fabrics, PVB can be used to produce good effects. It can be used to make tents, coats, food bags, raincoats, ponchos, etc.

(9) Leather coating: PVB film exhibits strong elongation at room temperature and maintains this property at low temperatures, so it can be used to prepare a soft and elastic film, which has become a unique property of PVB resin.

quality.

(10) Glossy face protection coating: used for varnish, wire paint and other various metal plating surfaces of woodworking crafts.

3. Adhesive: PVB contains hydroxyl, acetyl and aldehyde groups and has high bonding properties, so it can be made into various adhesives:

(1) Bonding of glass: Since PVB has extremely high adhesion, proper elasticity and flexibility, it is used to bond glass.

(2) Bonding of metal: After mixing PVB with phenolic resin, it can be formulated into different grades of acetal phenolic glue, which can be used for bonding various metals. After the solution is applied to the metal surface, after the solvent is evaporated, Metal heating and rolling

(3) Bonding of the enamel coil: The PVB solution is applied to the coil, and the coil can be bonded after heating.

(4) Heat-sealing adhesive: PVB can be mixed with natural resin, synthetic resin and plasticizer, and can be used as a heat-sealable adhesive.

(5) Adhesive for "transfer trademark": PVB can be used as a binder for porcelain "transfer trademark", which not only saves the process, but also improves the quality of the product. The burnt ceramic has bright color and smooth texture. As a resin for "ceramic flower paper", it has been widely used. In addition, it can also be used as a "transfer trademark" for textiles.

(6) Bonding film: PVB can be used for heat bonding of cloth to cloth or other materials when combined with other synthetic resins, synthetic rubbers and plasticizers.

(7) Pressure-sensitive adhesive: used as a binder raw material for a pressure-sensitive adhesive tape such as a cellophane tape or a polyethylene tape.

(8) Other binder: It can be used as a binder for a nonwoven fabric, a binder for electrostatic flocking, and a binder for leather.

4. Application in fiber processing:

(1) Coating: Apply PVB solution with plasticizer to various textiles to make it waterproof, prevent pollution, etc., and not damage the original feel and style of textiles. A resin, a curing agent, etc. can improve the processing effect, and PVB emulsion can also perform such processing.

(2) Fiber treatment agent: PVB aqueous dispersion containing plasticizer, which can be used as cotton fabric treatment agent, anti-shrinkage agent, anti-shock agent and stiffener. The various fibers are soft, wrinkle-free and light-resistant in the clothes obtained by sizing.

(3) Printing and dyeing of fabric: PVB solution and emulsion can be used for printing and dyeing of fabrics, with good printing and dyeing effect, washing and fading.

(4) Other resin finishing: The abrasion resistance and flexibility of the fabric can be improved.

(5) Parts: PVB is mixed with synthetic rubber such as butadiene rubber, neoprene, etc., and can be molded into electromechanical parts with high impact and high strength molds, hoses, pipes and bars.