



Vitel® 2200B

COPOLYESTER COATING RESIN

KEY FEATURES

- High tensile strength and low elongation
- Excellent clarity, hardness, and abrasion resistance
- Excellent clarity

DESCRIPTION

Vitel 2200B is a thermoplastic, high molecular weight, aromatic, linear saturated polyester resin. It is a hard resinous amorphous polymer exhibiting high tensile and low elongation. This premium quality resin finds specialized use either alone or modified in applications where high cohesive strength is of prime importance. This resin demonstrates superior adhesion, clarity, hardness and abrasion resistance. Vitel 2200B also exhibits good dielectric properties and good retention of physical properties after ultraviolet light exposure. Primary applications for Vitel 2200B are as primer, binder for pigments in inks, lacquers or hard top coatings.

KEY BENEFITS

- Strong bonds to a variety of substrates
- UV resistance
- Suitable for a range of specialized applications

SHELF LIFE

Approximately 12 months when resin is stored in originally closed containers at temperatures between 5 and 35°C (41 and 95°F).

STORAGE & HANDLING

Like all synthetic resins, Vitel 2200B can retain or develop static charge due to its handling. Precautions against a static discharge should be taken particularly in areas where solvent vapors exist.



TYPICAL PHYSICAL PROPERTIES

Description	Results
Intrinsic Viscosity	0.59 dL/g
CIE Lab Color	L* : 95 (min) b* : 10 (max)
Solubility (25% in MEK)	100%
Specific Gravity	1.27
Color / Form	Clear to Golden / Pellets or Granules
Odor / Taste	None / None
Typical Polymer Properties	Acid Number : 1-3 Hydroxyl Number : 3-5 Tg : 69°C Mn : 24,500 Mw : 47,500 Mz : 73,000 Mw/Mn : 1.94 (PS ref.)

OTHER TYPICAL PROPERTIES

Description	Results
Melt Flow (ASTM E 28-67)	313°F (156°C)
Melt Flow Index (ASTM D 1238-86)	8 g/10min (Dried) 13 g/10min (50% RH) 18 g/10min (95% RH)

Otherwise, there are no special precautions necessary in handling this resin. Under typical ambient conditions, Vitel 2200B is an inert material.

APPLICATION TECHNIQUES

Can be used on all dry laminating machines, with smooth or rotogravure rollers.

Since Vitel 2200B is most frequently applied from solution, solvent selection is important. Vitel 2200B is soluble in Methyl ethyl ketone, Methyl ethyl ketone/Toluene blends, cyclic ethers, chlorinated or stronger solvents.

A minimum application weight of 2 g/m² (dry) is recommended. Optimum adhesion is obtained with an application weight of approximately 3 g/m². For aggressive requirements, the coating weight needs to be increased to 4 g/m² or higher.

DILUTION

Dilution may be done with PU grades (< 0.1% H₂O-content) of Ethyl acetate, Acetone, MEK or a mixture of these solvents. The adhesive system should be processed at a solids content of approximately 20-23% when applied via gravure. Ideal coating viscosity is between 75-115 cP.

SOLUTION POT LIFE

Vitel 2200B in solution has very good pot life stability. If the container is well sealed, then the solution will keep for at least 6 months at room temperature storage. When used in conjunction with a curative, pot life will vary. It is not recommended to hold the reactive solution more than 8 hours before application.

DRYING

Drying conditions must be adjusted to the substrate, application weight and line speed in order to avoid the retention of solvents. The dried and fully cured adhesive film will be transparent and neutral in odor.

ACTIVATION TEMPERATURE

The minimum activation temperature is 250°F (121°C) but a temperature of 313°F (156°C) is recommended.

HEALTH & SAFETY PRECAUTIONS

The Safety Data Sheet should be consulted for proper handling, clean up and spill containment before use. Keep containers covered to minimize contamination.

Melt Viscosity at 215°C (ASTM D 3236-88)	2,900 poise
Shore Hardness D at 25°C (ASTM D 2240-86)	79
Tensile at Break (ASTM D 638-89)	9,600 psi (Crosshead speed, 2"/min)
Elongation at Break (ASTM D 638-89)	7%
Oxygen Diffusion (ASTM D3985-81)	18 cc/100 sq in/24 hour/1atm/1 mil
MVTR (ASTM F 372-73)	2.6 g/24 hour/100 sq in
Volume Resistivity	1.4x10 ¹⁵ (Ω/cm)
Dielectric Strength	1 mil : 6,500 V/mil 3 mil : 4,000 V/mil 5 mil : 2,750 V/mil 7 mil : 2,000 V/mil
Power Factor, 1 MHz	0.57%
Dielectric Constant, 1 kHz	3.37%
NOTE:	Shell production data

LIMITED WARRANTY

The Limited Warranty for this product can be found at www.bostik-us.com/resource-center/warranties or by calling 1-800-726-7845 (choose option 2, then option 2 again). To the maximum extent allowed by law, Bostik disclaims all other express or implied warranties, including without limitation warranties of merchantability and fitness for a particular purpose. Unless otherwise stated in the limited warranty, the sole remedy for breach of warranty is replacement of the product or refund of the buyer's purchase price. Bostik disclaims any liability for direct, incidental, consequential, or special damages to the maximum extent allowed by law. Disclaimers of implied warranties may not be applicable to certain classes of buyers and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. It is the buyer's obligation to test the suitability of the product for an intended use prior to using it. The Limited Warranty extends only to the original purchaser and is not transferable or assignable. Any claim for a defective product must be filed within 30 days of discovery of a problem, and must be submitted with written proof of purchase.

BOSTIK HOTLINE

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