



Vitel® 3550B-M

COPOLYESTER LAMINATING RESIN

KEY FEATURES

- Strong adhesion to PET films
- Low temperature activation
- Clean peel

DESCRIPTION

Vitel® 3550B-M is a high molecular weight, linear saturated polyester resin. Typically amber in color, this thermoplastic product is a highly flexible amorphous polymer that is tacky at room temperature, with high elongation and low tensile values. The unique physical properties of V3550B-M (low Tg, low softening point, and high electrical resistance) provide it with high flexibility, good solubility, and compatibility with common polyester modifying materials and adhesion to a broad variety of substrates. V3550B-M yields zipper-free adhesion and requires only conventional solvents such as MEK, Toluene, or Ethyl acetate. This resin is designed primarily for adhesive applications or as a modifier for hard resinous coatings. V3550B-M is most often used as a polyisocyanate modified, two-part laminating adhesive.

KEY BENEFITS

- Fast bond strength development
- Adhere to low surface energy substrates

PACKAGING

V3550B-M is sold in cartons of containing individually bagged 6lb. slabs of resin.

SHELF LIFE

The shelf life of V3550B-M is 90 days when resin is stored in originally closed containers at temperatures between 5 and 35°C.

TYPICAL PHYSICAL PROPERTIES

Description	Results
Appearance	Amber to Yellow Slab
CIELAB Color	L* : 90 (min.) b* : 40 (max.) a* : 4 (max.)
Intrinsic Viscosity	0.85 dl/g
Specific Gravity	1.22
Melt flow (ASTM E 28-67)	99°C
Brookfield Viscosity (36% solids in MEK)	570 cP
Solubility (36% in solids in MEK, 12 hrs)	100%
Shore hardness A (ASTM D 2240-86)	25
Tensile Strength (ASTM D 638-89)	30 psi
Elongation (ASTM D 638-89)	2,000 %
Dielectric strength	3 mil : 840 volts/mil 5 mil : 780 volts/mil 7 mil : 760 volts/mil

TYPICAL POLYMER PROPERTIES

Description	Values
Acid Value	0 - 2
Hydroxyl Value	3 - 6
Glass Transition, Tg (inflection)	-11°C
Molecular Weight, Mw	75,000
Polydispersity, Mw/Mn	1.90

STORAGE & HANDLING

Elevated warehouse temperatures may cause more cold flow in the resin and difficulties in the removal of the wrapping film. Static charges may also develop due to the unwrapping of this film. Precautions against a static discharge should be taken particularly in areas where solvent vapors exist. Otherwise, there are no special precautions necessary in handling this resin. Under typical ambient conditions, V3550B-M is an inert material.

APPLICATION TECHNIQUES

V3550B-M is most frequently applied from solution, solvent selection is important. V3550B-M is soluble in Ethyl acetate or Toluene, Methyl ethyl ketone, Methyl ethyl ketone/Toluene blends, cyclic ethers, chlorinated or stronger solvents.

V3550B-M can be applied via all dry laminating machines, with smooth or rotogravure rollers.

The minimum coat weight for V3550B-M is at least 2 g/m² (dry). Optimum adhesion is obtained with an application weight of approx. 3 g/m². For aggressive requirements, the coating weight needs to be increased to 4 g/m² or higher.

DILUTION

Dilution of V3550B-M 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 approx. 20 - 23% when applied via gravure. Ideal coating viscosity is between 75 - 115 cps.

SOLUTION POT LIFE

V3550B-M in solution has very good pot life stability. If container is well sealed solution will keep for at least 6 months at room temperature storage. When used in conjunction with curative, pot life will vary but not recommended to hold reactive solution more than 8 hours before application.

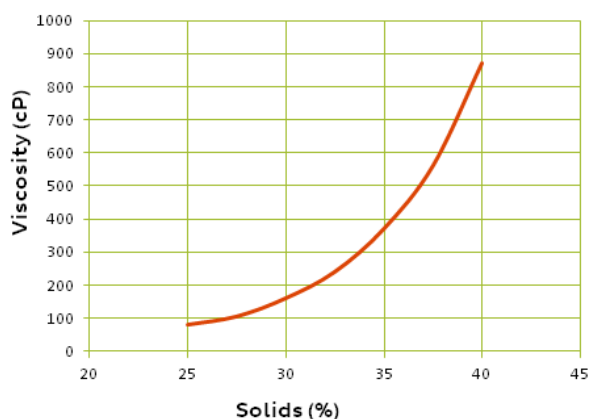
DRYING

Drying conditions must be adjusted to 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 for V3550B-M is 60°C but 99°C is recommended .

VISCOSITY CURVE in MEK



FOOD LEGISLATION

V3550B-M complies with the positive lists of many internationally accepted guidelines for the production of articles intended to come into direct and indirect contact with foodstuff. Please contact your Bostik Representative with the specific application.

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.

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

Smart help
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