



Vitel® 1904NSB

COPOLYESTER EXTRUSION RESIN

KEY FEATURES

- Compatible with other Vitel® resins for tailored properties
- Strong adhesion to PET and metal substrates
- Excellent flexibility and toughness

DESCRIPTION

Vitel® 1904NSB is a semi-crystalline, linear, saturated copolyester resin. It is a tough, yet flexible resin that should be considered for applications that require high cohesive strength. Vitel® 1904NSB adheres well to a variety of substrates, including APET, CPET, metal foils, and PVC. Antimony is not used to manufacture Vitel® 1904NSB.

PACKAGING

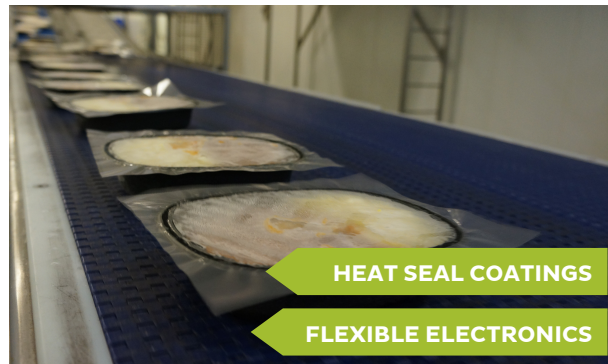
Vitel® 1904NSB is available in drums and bulk bags. Please contact your Bostik representative for more packaging options.

SHELF LIFE

The shelf life of Vitel® 1904NSB is approximately 3 months when stored in its sealed, original container at temperatures between 5 and 35 °C. To extend shelf life, use cold storage below 4 °C.

STORAGE & HANDLING

Like all synthetic resins, Vitel® 1904NSB can retain or develop static charge due to its handling. Precautions against a static discharge should be taken, especially near flammable vapors.



TYPICAL PHYSICAL PROPERTIES

Description	Results
Appearance	Opaque, light yellow pellets
Specific Gravity	1.23
CIE Lab Color	L*: 90 (min.) b*: 14 (max.)

TYPICAL POLYMER PROPERTIES

Description	Results
Acid Number	0-2 mgKOH/g
Hydroxyl Number	1-3 mgKOH/g
Intrinsic Viscosity	0.97 dl/g
Glass Transition Temperature	-4 °C
Melt Flow	143 °C

APPLICATION BY EXTRUSION

When applying Vitel® 1904NSB to a substrate via extrusion, cool thoroughly before wind-up to reduce blocking. Observe the following general extrusion conditions (dependent on process and extruder screw design): Dry resin at 68°C for 4-5 hours before use, run feed throat cooling, heat Zone 1 to 166°C, and maintain a die temperature of 204°C.

APPLICATION BY SOLVATION

Due to the crystallinity of Vitel® 1904NSB, the resin requires stronger solvents for complete solubility. Solvents that can be used to dissolve the resin are 1,3-dioxolane, chlorinated solvents, and THF. The solution can then be used on all dry laminating machines, with smooth or rotogravure rollers. A solids content of approximately 15 - 20% is ideal when applied via gravure, with a coating viscosity of between 75 - 115 cps.

SOLUTION POT LIFE

Vitel® 1904NSB in solution has very good pot life stability. If container is well sealed, the solution will keep for at least 6 months at room temperature storage. Solutions of Vitel® 1904NSB have a tendency to gel. Gelling can be reversed through agitation and/or heat. When used in conjunction with a curative, solution pot life will vary, but it is not recommended to hold the reactive solution more than 8 hours before application.

APPLICATION WEIGHT

It is recommended to apply Vitel® 1904NSB at a minimum coating weight of 2 g/m² (dry). Optimum adhesion is obtained with a coating weight of approximately 3 g/m². For aggressive requirements, the coating weight should be increased to 4 g/m² or higher.

DRYING

Drying conditions must be adjusted to substrate, coating 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

For sealing to APET, the minimum activation temperature for Vitel® 1904NSB is 129 °C, with the recommended temperature being 143 °C. For sealing to CPET, the minimum activation temperature is 143 °C.

FOOD LEGISLATION

Vitel® 1904NSB complies with the positive lists of many internationally accepted guidelines for the production of articles intended to come into 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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