



# Vitel® 1916NSB-P

## COPOLYESTER EXTRUSION RESIN

### KEY FEATURES

- Provides a strong, peelable bond
- Processes well in coextrusion applications
- Formulated for reduced blocking and improved slip

### DESCRIPTION

Vitel® 1916NSB-P is a semi-crystalline, high molecular weight, saturated copolyester resin. It is a very tough yet flexible polymer that exhibits a high tensile modulus. It provides high cohesive strength in heat seal applications and adheres well to a variety of traystocks such as APET, CPET, and PVC. Vitel® 1916NSB-P has been formulated to reduce blocking to rolls and is manufactured without the use of Antimony.

### PACKAGING

Vitel® 1916NSB-P is packaged in bags and drums. Contact your Bostik representative for other packaging options.

### SHELF LIFE

Vitel® 1916NSB-P has a shelf life of 3 months when stored in original, sealed containers at temperatures between 5 and 35°C. To extend shelf life, use cold storage below 4 °C.

### STORAGE & HANDLING

Vitel® 1916NSB-P can slowly absorb moisture from the air, causing foaming and degradation upon melting. Care should be taken to minimize the amount of air exposure. Drying Vitel® 1916NSB-P prior to processing can reduce the likelihood of moisture affecting the resin performance.



HEAT SEAL COATINGS

DUAL OVENABLE LIDDING

### TYPICAL PHYSICAL PROPERTIES

Description	Results
Melt Flow Index (190 °C, 2.16 kg)	20 g/10 min
Appearance	Opaque, grey pellets
CIE Lab Color	L* 70 (min.) b* 20 (max.)
Viscosity	305,000 cPs @ 190 °C 150,000 cPs @ 204 °C 102,000 cPs @ 218 °C

### TYPICAL POLYMER PROPERTIES

Description	Results
Intrinsic Viscosity	0.84 dl/g
Glass Transition Temperature	-2 °C
Acid Number	0-2 mgKOH/g
Hydroxyl Number	1-3 mgKOH/g

## APPLICATION TECHNIQUES

When applying Vitel® 1916NSB-P via extrusion, cool thoroughly before wind-up to reduce blocking. Observe the following general extrusion conditions: Dry resin at 68°C for 4-5 hours before use, run feed throat cooling, heat zone 1 to 166°C, heat die to 204°C. Extrusion conditions depend heavily on the specific process and extruder screw design.

To apply in solution form, Vitel® 1916NSB-P requires stronger solvents for complete solubility (due to the crystallinity of the polymer). Solvents that can be used to dissolve the resin are 1,3-dioxolane, chlorinated solvents, and THF. Once solvated, the system can be used on all dry laminating machines, with smooth or rotogravure rollers.

The minimum coating weight recommended is 2 g/m<sup>2</sup> dry. Optimum adhesion is obtained with a coating weight of approximately 3 g/m<sup>2</sup>. For aggressive requirements, the coating weight needs to be increased to 4 g/m<sup>2</sup> or higher.

## DILUTION

Dilution may be done with 1,3-Dioxolane, THF, or stronger solvents. The adhesive system should be processed at a solids content of approximately 15-20% when applied via gravure. Ideal coating viscosity is between 75-115 cP.

## SOLUTION POT LIFE

The pot life stability of Vitel® 1916NSB-P in solution is very good. If container is well sealed, the solution will keep for at least 6 months at room temperature storage. Un-catalyzed solution has tendency to gel, which can be reversed through agitation and/or heat.

## 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 recommended activation temperature is 264 °F (129 °C), but the recommended temperature is 320 °F (160 °C).

## FOOD LEGISLATION

Vitel® 1916NSB-P 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

Vitel® 1916NSB-P can retain or develop static charge due to its handling. Precautions against a static discharge should be taken. Use caution near flammable vapors.

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](http://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  
**1-800-726-7845**

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