



Technical Data Sheet

3M™ Polyolefin Bonding Adhesive 3731

Product Description

3M™ Polyolefin Bonding Adhesive 3731 is a 100% solids, high heat resistant adhesive that bonds to a variety of substrates including polyethylene, polypropylene and many other plastics.

Product Features

- Solvent free, 100% solids
- High temperature resistance
- Bonds well to polyolefin based plastics
- Light tan color
- Fast setting

Technical Information Note

The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Typical Physical Properties

Attribute Name	Test Method	Temperature	Value
Color			Light Tan
Flash Point			273 °C ¹
Ball & Ring	ASTM E-28-607		157 °C
Specific Gravity			0.92
Viscosity		191 °C	12,000 cP ²

¹ C.O.C.

² Brookfield Thermocel Viscometer in Centipoise using a #27 Spindle @ 10 RPM.

Typical Performance Characteristics

180° Peel Adhesion

Temperature: 23 °C

Substrate	Value
ABS	40 N/cm ¹
Cold Rolled Steel	26 N/cm ¹
High Density Polyethylene (HDPE)	40 N/cm ¹
Nylon	33 N/cm ¹
Polycarbonate (PC)	39 N/cm ¹
Polypropylene (PP)	39 N/cm ¹
Polystyrene (HIPS)	26 N/cm ¹
Polyvinyl chloride (PVC)	32 N/cm ¹

¹ Peel bonds of cotton duck were tested at a peel angle of 180° @ 51 mm/min (2 in/min) separation rate @RT.

Overlap Shear Strength

Temperature: 23 °C

Substrate	Value
High Density Polyethylene (HDPE)	30 kg/cm ²
ABS	32 kg/cm ²
P.V.C. (Rigid)	30 kg/cm ²
Polystyrene (HIPS)	18 kg/cm ²
Polycarbonate (PC)	30 kg/cm ²
Nylon	33 kg/cm ²
Douglas Fir	35 kg/cm ²
Cold Rolled Steel	27 kg/cm ²

Temperature Resistance

Temperature	Value
129 °C	0.14 kg/cm ²
135 °C	0.07 kg/cm ²
152 °C	0.02 kg/cm ²

Handling/Application Information

Directions for Use

1. 3M™ Polyolefin Bonding Adhesive 3731 is designed for applications using a 3M™ Polygun™ EC Applicator at the 4 or 5 module setting or a 3M™ Polygun™ II Applicator.
2. Recommended equipment temperature for bulk dispensing 350-375°F (177-191°C).
3. Apply to one surface. Make bond as soon as possible. Bond strength is maximized when open time is reduced.
4. After bond is made, there is immediate strength and no clamping is necessary.
5. Adhesive should be allowed to fully crystallize (possibly up to 12 hours) to obtain full performance properties.

Storage and Shelf Life

Store under normal conditions of 16° to 27°C (60° to 80°F) and 40 to 60% relative humidity in the original packaging, out of direct sunlight. For best performance, use this product within 24 months from date of manufacture.

Precautionary Information

Refer to Product Label and Material Safety Data Sheet for health and safety information before using this product. For additional health and safety information, call 1-800-364-3577

Information

Precautionary Information: Refer to product label and Material Safety Data Sheet for health and safety information before using the product. For information, please contact your local 3M Office. You can click or scan QR code to see contact detail or visit www.3M.com Important Information: All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method or application. All questions of liability relating to this product are governed by the terms of the sale subject, where applicable, to the prevailing law. Values presented have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications. This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations.

ISO Statement

This product was manufactured under a 3M quality system registered to ISO 9001 standards.

For Additional Information

To request additional product information or to arrange for sales assistance, please contact your local 3M office.

3M™ Centre
Cain Rd, Binfield, Bracknell RG12 8HT, United Kingdom
3m.co.uk/iatd

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