



Laminating Adhesives Data Page

FOD # 0335

3M™ 9820 Double-Coated Polyester Laminating Adhesive

Product Construction

Adhesive:	1.5 mils	(38 microns)	#900A “Hi-Shear” Acrylic
Carrier:	0.5 mils	(13 microns)	Polyester Film
Adhesive:	1.5 mils	(38 microns)	#900A “Hi-Shear” Acrylic
Liner:	3.5 mils	(89 microns)	60# Densified Kraft

Features

- High shear acrylic adhesive for excellent bond to a variety of foam substrates.
- Excellent temperature and chemical resistance.
- Excellent environmental stability.
- Excellent dimensional stability with polyester carrier.

Applications

- General purpose foam laminating (54”).
- General purpose lamination for fabricated parts.

Physical Properties

(Typical values - not for specification use)

Initial Adhesion - Dynamic Peel

90 degree peel (ASTM D3330 modified)

12"/min (305mm/min), 2 mil sample with aluminum foil backing.

<u>Surface</u>	<u>Oz./In.</u>	<u>N/100mm</u>
Stainless	39	43

Environmental Performance

Properties defined are based on the adhesion of impervious faceplate materials to a stainless steel test surface.

Bond Build Up:	The adhesive bond increases as a function of time and temperature.
Chemical Resistance:	With proper application, parts will maintain their adhesion after exposure to chemicals such as gasoline, Freon [®] , oil, sodium chloride solution, mild acid, and alkalis.
Humidity Resistance:	High humidity has minimal effect on adhesive performance. Bond strengths are generally higher after exposure to 90 degrees F (32 degrees C) at 90% relative humidity for 7 days.
Water Resistance:	Immersion in water has no appreciable effect on the bond strength (room temperature for 72 hours).
Heat Resistance:	200 degrees F short term.
Low Temp. Resistance:	-40 degrees F (-40 degrees C).
Shelf Life:	Product retains its performance properties for two years from date of manufacture if properly stored at room conditions of 72 degrees F (22 degrees C) and 50% relative humidity.

Processing

Die-cutting:	Good die-cuttability. Lubricate dies with vanishing oil or similar low residue lubricants for improved processing.
Roll Laminating:	Use rubber over steel roll set up with moderate application pressure. Make adhesive to substrate contact at nip area only.

Special Considerations/Application Tips

For maximum bond strength, surface should be thoroughly cleaned and dried. A typical cleaning solvent is heptane or isopropyl alcohol. When using cleaning solvents, vanishing oils, or lubricants, consult the manufacturer's Material Safety Data Sheet for proper handling and storage instructions.

Bond strength may be improved with firm application pressure and moderate heat causing adhesive to flow and develop intimate contact with bonding surface.

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