



Technical Data Sheet

Polyurethane Lamination Packaging Adhesive

Product	Eagle SB 80 – Eagle HR 75	W.e.f	08/04/2022
Category	Two component solvent base	Rev.	00

DESCRIPTION:

Eagle SB 80/ Eagle HR 75 is a bi-component solvent based polyurethane adhesive for flexible packaging laminates. Eagle SB 80 is adhesive component and eagle HR 75 is hardener component.

APPLICATION:

It suitable for preparing general performance laminates. It works on variety of printed and unprinted substrates such as polyester, polyethylene, polypropylene and metallized substrates.

SPECIFICATION:

Properties	Eagle SB 80 (OH Component)	Eagle HR 75 (NCO Component)
Colour and Appearance	Clear light yellow liquid	Clear light yellow liquid
Solids (%)	80±2	75±2
Viscosity @ 25°C	4000±1000 cPs	500±200 cPs
Density	1.18±0.01	1.08±0.01
Solvent	Ethyl Acetate	Ethyl Acetate
Mixing ratio	100	18

MIXING PROCEDURE:

Eagle SB 80 has to be diluted with corresponding solvent to desired application solids. Then accurate amount of Eagle HR 75 should be added under agitation.

DILUTION CHART:

Application Solids	Eagle SB 80	Eagle SB75	Ethyl Acetate *	Viscosity (Secs.)
25	100	18	247	12-15
30	100	18	186	13-17
35	100	18	140	14-18
40	100	18	108	15-19

**Use ethyl acetate with moisture content not greater than 0.5%*

COATING:

Eagle SB 80/ Eagle HR 75 can be applied with all dry laminating units that have smooth or gravure rolls.

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COATING WEIGHT:

It is necessary to provide sufficient uniform coating weight.

Substrate	Recommended coating weight (g/m ²)
Lightly printed	2.0-2.5
Heavily printed	3.0-3.5
Porous substrate like paper	4.0-7.0

DRYING:

Ensure complete solvent removal otherwise it will create defect in laminate and problem of residual odour. The drying temperature is in the range of 60°C -70°C.

NIP TEMPERATURE:

Warmed nip roller (60°C - 80°C) is preferable.

POT LIFE:

Eagle SB 80/ Eagle HR 75 mix adhesive has a pot life of 8 hours provided it stored in proper manner. Usage beyond its pot life can generate defects in laminates therefore not recommended.

CURING:

Initial bond strength is good. The laminates can be slited after 24 hours. Optimum performance will be achieved after 5 days stored @ 40-50°C.

PRE-TREATMENT OF FILMS:

The films should be treated up to a level of 38 dyne/cm to achieve minimum level of surface wettability.

FDA STATUS:

Eagle SB 80/ Eagle HR 75 are suitable to make laminates for food packaging in accordance with regulation 21 cfr, Section 175.05 of the Food and Drug Administration, U.S.A.

SHELF LIFE:

Six months stored in original sealed containers between 10-35°C.

Note: Additives used in inks and films effects the laminate performance hence needed to be validated before conducting bulk production

DISCLAIMER:

This information has been generated from laboratory tests and commercial trials. They are offered in good faith, but without guarantee, as conditions and methods of usage of this product is not in our control. We recommend that user should take small run and decide for its suitability before adopting in commercial run.