



HERBERTS LG 9780-A / HARDENER KN 75

TWO COMPONENT POLYURETHANE ADHESIVE

KEY BENEFITS

- For all film/film and film/aluminum laminates
- Suitable for printed, unprinted or metallized films

DESCRIPTION

Herberts-LG 9780-A with Hardener KN 75 is a solvent based two component polyurethane-cross-linking adhesive system.

RANGE OF APPLICATION

Herberts-LG 9780-A / Hardener KN 75 is an "all-round" adhesive system for all "general purpose" applications of film/film and film/aluminium laminates. In general, the surfaces can be printed, unprinted or metallized.

This adhesive system is also suitable for the production of laminates of paper and cardboard against plastic films and aluminium.

SUITABILITY

Before starting production the suitability of the used printing inks, film qualities, film additives, coatings etc. has to be controlled individually. In case of any change of quality of these printing inks, films etc. new tests concerning the suitability are necessary. The desired properties of the complex have to be verified by performance tests prior to production.

PHYSICAL PROPERTIES

PROPERTIES	LG 9780-A	KN 75
Component	OH	NCO
Solid content [%]	80+/-2	75+/-2
Solvent	Acetone	Ethyl Acetate
Viscosity Brookfield at 25°C [mPa.s]	3000-5000	1000-3000
Mixing ratio [parts by weight]	100	15

DILUTION

Dilution may be done with PU grades (< 0,1 % H₂O-content) of ethyl acetate, acetone, MEK or a mixture of these solvents. The adhesive system should be processed at a solids content of approx. 35 %.

DILUTIONS

PROPERTIES		DILUTION 1	DILUTION 2
Solid content	[%]	45	40
LG 9780-A	[kg]	100	100
KN 75	[kg]	15	15
Ethyl acetate	[kg]	88	113
Viscosity Ford-cup 4 at 25°C	[sec.]	20	16

DILUTIONS

PROPERTIES		DILUTION 3	DILUTION 4
Solid content	[%]	35	30
LG 9780-A	[kg]	100	100
KN 75	[kg]	15	15
Ethyl acetate	[kg]	146	189
Viscosity Ford-cup 4 at 25°C	[sec.]	15	14

POT LIFE

24 hours at ambient temperature if diluted (solids content of the mixture 25 %). Humidity will negatively influence the pot life.

APPLICATION PARAMETERS

Herberts laminating adhesive must be applied using appropriate laminating equipment. Different methods are possible, the most preferred ones being application by rotogravure system.

Herberts laminating adhesives may be used with cold or heated nip rollers. For dry laminations heated nip rollers are preferable (50 to 60°C), but not for the lamination of paper for which we recommend working with cold rollers.

APPLICATION WEIGHT

At least 2 g/m² dry. Optimum adhesion is obtained with an application weight of approx. 3 g/m².

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 odour.

CURING TIME

Rewinding, slitting as well as the production of triplex-laminates is possible already after a few hours. Maximum cure will be reached in 7 to 10 days depending on temperature and humidity conditions.

STORAGE

12 months for **LG 9780-A** and 9 months for **Hardener KN 75** when adhesive and hardener are stored in originally closed containers at temperatures between 10 and 35°C. The remainder in partly emptied barrels must be used as soon as possible.

PRECAUTIONS

During processing, solvent vapours must be exhausted by an adequate ventilation. When processing these resins precautions for the use of isocyanates have to be observed.

The corresponding EEC safety data sheets are part of this technical information.

FOOD LEGISLATION

LG 9780-A / KN 75 is in compliance with the positive lists of the following, internationally accepted guidelines for the production of articles intended to come into indirect contact with foodstuff :

- recommendations of the German Health Dept. (**BfR**), chapter XXVIII,
- the **EEC**-directive 2002/72 and amendments (including 90/128/EC and amendments), the Council of Europe's resolution **AP (96) 5** and amendment,
- CFR, title 21, § 175.105 of the **FDA**, Washington D.C., respectively.

Herberts **LG 9780-A / KN 75** is BADGE-free.

REMARK

Prior tests are advised (or recommended) for any industrial use. Moreover, the recommendations for implementation should be followed. It is recommended to follow our precautionary measures listed in the specification sheets.

The use of the adhesive has to be discussed with our technical support team. Please refer to our general technical brochure "Bostik Laminating Adhesives" for additional information.

BOSTIK CAN ALSO OFFER

- 1K-LF laminating adhesives
- 2K-LF laminating adhesives (cold and warm system)
- 1K-LH laminating adhesives
- 2K-LH laminating adhesives, for food and industrial applications
- Gloss lacquers of the series GL 3000
- Primers; e.g. for PVDC coating, for printing ink applications, as extrusion primers
- Heat seal lacquers, sealable against PVC, PS and PP
- Solvent borne colour concentrates for laminating adhesives
- Heat seal coatings based on Vitel® resins
- Cold seal Adhesives

Please contact us directly or our local representation for further assistance.

1K = one component
2K = two components

LF = solvent free
LH = solvent based

BOSTIK HOTLINE

Smart help (080) 27833520





MP 1009-N / HARDENER KS 75

TWO COMPONENT POLYURETHANE ADHESIVE

KEY BENEFITS

- For all film/film and film/aluminum laminates
- Suitable for printed, unprinted or metalized films
- good product resistance in aluminium complexes

DESCRIPTION

MP 1009-N with **HARDENER KS 75** is a solvent based two component polyurethane-cross-linking adhesive system.

RANGE OF APPLICATION

MP 1009-N / Hardener KS 75 is an "all-round" adhesive system for all "medium performance" applications of film/film and film/aluminium laminates. In general, the surfaces can be printed, unprinted or metallized.

This adhesive system is also suitable for the production of laminates of paper and cardboard against plastic films and aluminium.

SUITABILITY

Before starting production the suitability of the used printing inks, film qualities, film additives, coatings etc. has to be controlled individually. In case of any change of quality of these printing inks, films etc. new tests concerning the suitability are necessary. The desired properties of the complex have to be verified by performance tests prior to production.

PHYSICAL PROPERTIES

PROPERTIES	MP 1009-N	KS 75
Component	OH	NCO
Solid content [%]	69+/-2	75+/-2
Solvent	Acetone	Ethyl Acetate
Viscosity Brookfield at 25°C [mPa.s]	3000-5000	1000-3000
Mixing ratio [parts by weight]	100	10-12

DILUTION

Dilution may be done with PU grades (< 0,1 % H₂O-content) of ethyl acetate, acetone, MEK or a mixture of these solvents. The adhesive system should be processed at a solids content of approx. 35 %.

DILUTIONS

PROPERTIES		DILUTION 1	DILUTION 2
Solid content	[%]	40	35
MP 1009-N	[kg]	100	100
KS 75	[kg]	10	10
Ethyl acetate	[kg]	81	108
Viscosity Ford-cup 4 at 25°C	[sec.]	26	20

DILUTIONS

PROPERTIES		DILUTION 3	DILUTION 4
Solid content	[%]	30	25
MP 1009-N	[kg]	100	100
KS 75	[kg]	10	10
Ethyl acetate	[kg]	145	196
Viscosity Ford-cup 4 at 25°C	[sec.]	17	15

POT LIFE

24 hours at ambient temperature if diluted (solids content of the mixture 25 %). Humidity will negatively influence the pot life.

APPLICATION PARAMETERS

Herberts laminating adhesive must be applied using appropriate laminating equipment. Different methods are possible, the most preferred ones being application by rotogravure system.

Herberts laminating adhesives may be used with cold or heated nip rollers. For dry laminations heated nip rollers are preferable (50 to 60°C), but not for the lamination of paper for which we recommend working with cold rollers.

APPLICATION WEIGHT

At least 2 g/m² dry. Optimum adhesion is obtained with an application weight of approx. 3 g/m². In case of special stress of laminates (i.e. sterilisation, filling goods resistance etc.) as well as in cases of reverse printed films the coating weight has to be correspondingly increased: Al-laminate structures which have to be sterilised, ≥ 4 g/m², "Steral"-laminates ≥ 6 g/m².

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 odour.

CURING TIME

Rewinding, slitting as well as the production of triplex-laminates is possible already after a few hours. Maximum cure will be reached in 7 to 10 days depending on temperature and humidity conditions.

STORAGE

12 months for **MP 1009-N** and 9 months for **HARDENER KS 75** when adhesive and hardener are stored in originally closed containers at temperatures between 10 and 35°C. The remainder in partly emptied barrels must be used as soon as possible.

PRECAUTIONS

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