

EF2272A/EF2272B Laminating Polyurethane Adhesive

Description

EF2272A/EF2272B is an Ester based two-component aromatic polyurethane adhesive specializing for laminating aluminum metallized film with high barrier film, widely used in laminating of various treated film like BOPP、PET、VMPET、VMCPP、VMOPP、NY、PE、CPP、AL、Paper、etc .The adhesive has excellent odorlessness, transparency, flexibility, and aging resistance. And it offers high initial bonding strength in laminating aluminum foil and aluminum metallized film with high peel strength, good wetting of the films, excellent coating processability. It offers resistant to 100°C boiling for 40 minutes in laminated structure of film/foil.

Declaration

OCHEM EF2272A/2272B 2-component EA base polyurethane adhesive are in compliance with the positive lists of the following, internationally accepted guidelines for the production of articles intended to come into indirect contact with food stuff.

- EU RoHS directive (EU) 2015/863 amending Annex II to directive 2011/65/EU
- CFR, title 21, § 175.105 of the FDA, Washington D.C., respectively
- Regulation (EC) No 1907/2006 concerning the REACH

Technical Properties

These properties are typical but do not constitute specifications.

Item	EF2272A (OH component)	EF2272B (NCO component)
Type	Main agent	Hardener
Ingredient	Polyester polyol agent	Isocyanate-terminated Polymer
Appearance	Light yellow transparent liquid	Light yellow transparent liquid
Solid Content(%)	72±2	75±2
Viscosity (mPa.s20°C)	5000±1000	2500±1250
Solvent	Ethyl acetate	Ethyl acetate
Mix Proportion	5	1
Shelf life	360days	360days

Typical features:

- Specializing to laminate aluminum metallized film with high barrier film with resistance to 100°C boiling for 40 minutes.
- Odorless, the film laminated by EB2272A/B has good transparency, flexibility, aging resistance.
- High initial bonding strength, good peeling strength for structural foil-to-film and metallized film to film..
- With great wettability to films, EF2272A/EF2272B have good working property.

Recommended Operating Conditions

- ◆ Application Method Anilox roller or flexo roller
- ◆ Application Cylinder Anilox roller 100-200 line (65-80 line per cm)

◆	Application solids	20-40% (Recommend 30%)
◆	Pot Life	Static 8 hours approximately
◆		Dynamic 24 hours approximately
◆	Dry Coating Weight	Anilox roller 2.0-4.0 gsm; flexo roller 2.0-3.0 gsm
◆	Drying Section Temperature	50-60°C 60-70°C 70-80°C(three section)
◆	Laminating Temperature	50-80°C
◆	Cure Time	45-55°C 24 hours for general purpose, 48hours for boiling grade or Al foil
◆	Cleaning Solvent	Ethyl Acetate

Mix Ratio By Weight

Solid content(%)	Mix Ratio		Operating Mix Ratio In Drums Weight		
	EF2272A	EF2272B	EF2272A	EF2272B	Ethyl Acetate(kgs)
40	5	1	20	4	19.5
35	5	1	20	4	25.7
30	5	1	20	4	33.6
25	5	1	20	4	45.6

Solvent is ethyl acetate, acetone, MEK, the water content should be less than 0.03%, the alcohol content should be less than 0.02%, Ethyl acetate is recommended.

Package

Pack in steel drum normally.

Main agent is 20kg/drum. Hardener is 4kg/drum.

Safety & Storage

Store in cool, dry, well-ventilated area away from heat and ignition sources . Keep container tightly closed. Refer to MSDS for more safety information

Precautions

1. The LDPE and CPP films must be corona-treated with a surface tension greater than 38 mN/m. The PA film must be double-corona treated as an intermediate layer. The surface tension must not be less than 52 mN/m; the surface tension of the PET film must not be Less than 52 mN/m.
2. The temperature and humidity of the environment have a great influence on the time for storing the configured adhesive. It is recommended to arrange the adhesive in small quantities for a few times in high temperature and high humidity weather to avoid waste.
3. During the laminating processing, care must be taken to check and control the viscosity.
4. Residual adhesive: The remaining adhesive cannot be used in principle. If the amount of residual liquid is excessive, it shall be sealed and stored in cool place after dilution, which could be used as diluent for operation in next day, and a small amount shall be little by little added to the newly prepared adhesive solution. It cannot be used any more, if it appears cloudy, translucent or thickened.
5. The concentration and additives in the film have an influence on the bonding strength of the laminated film and must be selected before use.
6. Do not mix this product with other adhesives. If necessary, please consult our technical department.

7. Pay attention to fire prevention and static elimination.

Important notice

These documents we provided are made on the basis of our recent knowledge and experience, all these terms we mentioned are only suitable in normal condition and could be used as references. Please test and affirm before formal production or contact with our technician to some especial structures of films and stuffs packed, we do not take on any legal duty for these documents.

