

EF2072A/EF2072B Laminating Polyurethane Adhesive

Description

EF2072A/EF2072B is an Ester based two-component aromatic polyurethane adhesive specializing for Al foil laminating, widely used in laminating of various treated film like BOPP、PET、PA、PE、CPP、AL、Paper、etc .The adhesive has excellent odorlessness, transparency, flexibility, and aging resistance. And it offers high initial bonding strength in aluminum/plastic laminating structure with high peel strength, good wetting of the films, excellent coating processability.

Declaration

OCHEM EF2072A/EF2072B 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	EF2072A (OH component)	EF2072B (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)	4250±750	2500±1250
Solvent	Ethyl acetate	Ethyl acetate
Mix Proportion	5	1
Shelf life	360days	360days

Typical features:

- Specializing to laminate Al foil with other plastic film., effective to avoid the happening of tunnel.
- Odorless, the film laminated by EB2072A/B has good transparency, flexibility, aging resistance.
- High initial bonding strength, good peeling strength for structural AL/plastic film.
- With great wettability to films, EF2072A/B have good working property.
- **It is not recommended to be used in laminating film/metallized film, please choose EF2272A +EF2272B to instead of EF2072A + EF2072B for laminating VMPET,VMCPP or VMOPP.**

Recommended Operating Conditions

- ◆ Application Roller 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

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| ◆ | Dynamic | 24 hours approximately |
| ◆ | Dry Coating Weight | 2.0-4.0 gsm depending on structure |
| ◆ | Drying Section Temperature | 50-60°C 60-70°C 70-80°C(three section) |
| ◆ | Laminating Temperature | The temperature is generally controlled at 50-80 °C.The film susceptible to temperature is 50 - 60°C, and the other film can be 70- 80°C. |
| ◆ | Cure Time | 24-48 hours (45-55°C) 48hours (25°C) for normal structures and 72hours (25°C) for special structures (PET/AL, PET/VMPET and PET/VMCPP) |
| ◆ | Cleaning Solvent | Ethyl Acetate |

Mix Ratio By Weight

Solid content %	EF2072A KGS	EF2072B KGS	Ethyl Acetate KGS
35	5	1	6.4
30	5	1	8.5
25	5	1	11.4
20	5	1	15.8
15	5	1	23

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.

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.

Package

Pack in steel drum normally.

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

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.

