



STEP-OPENING ENTERPRISE CO.,LTD

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LA-650 Polyurethane Adhesive

HA-650 Isocyanate Hardener (Boiling & Heat Resistant)

【Instruction】

LA-650 is Polyurethane which must mix with HA-650 Isocyanate Hardener. It can reach requirements of steaming, boiling, content tolerant, sterilization. It can be used on heat resistance laminated materials up to 121°C for 40 minutes. Excellent performance on adhesion, peeling strength, layer toughness, clear, aging resistance, cold resistance, sealing effects of vacuuming. It fits bags for all kind of sour, salt, spicy, marinated products. The adhesives are good at flatness, spreading, wet, stability. Applicable to all high, middle, slow speed lamination machines.

【Film Materials & Lamination Structures】

LA-650 is Polyurethane must combine with HA-650 Isocyanate Hardener that can be used for laminated contractures made of the following materials: NYLON//CPP, PET//CPP, PET//ALUMINUM FOIL//CPP, NYLON//ALUMINUM FOIL//CPP、NYLON//PE, PET//(PVC//ALUMINUM MATERIALS).

【Application】

1. Dilution : Use Ethyl Acetate (water and Alcohol contents should be under 300ppm) as dilution.
2. Mixing Ratio (Weight ratio):
LA-650 : HA-650 : Ethyl Acetate=10 : 1.5 : 8-10.
3. Mixing : 50% Ethyl Acetate mix with HA-650 in a mixing container. After stirring them evenly, put LA-650 into the container and keep stirring evenly. Add the rest 50% of Ethyl Acetate and keep stirring evenly.
4. Calculation of Diluted Solid Contents(by weight) :
$$(\text{weight of LA-650} \times 50\% + \text{weight of HA-650} \times 75\%) / (\text{weight of LA-650} + \text{weight of HA-650} + \text{weight of Ethyl Acetate})$$

Note : The diluted solid contents should be based on material types, packaging contents, anilox numbers on roller, lamination machine speed ; normally is 25-35%.
5. Usage : Usually between 2-3 g/m² for dry lamination. If used for food package with highly boiling or extensive aluminum sheet, it needs to be 3.5-5g/m².
6. Dryness : To make solvent of adhesive evaporating from films completely, the

temperature of tunnel must work with the lamination machine speed, gluing amount and materials. Normally they are three-steps-mode, 55°C-65°C-75°C, gradually heating up with good air inhalation and exhalation.

7. Lamination : Based on different material to adjust temperature, it is usually 50-80°C. If films are temperature sensitive, the temperature should be around 50-60°C. If films are not temperature sensitive, the temperature should be around 60-70°C. When laminating with aluminum sheet, the temperature should be around 70-80°C.
8. Aging : Normally adhesives in the beginning of lamination cannot reach required adhesion. It needs to be in aging room under 50-60°C and 24-48 hours then goes to the third steps of lamination or slitting.
9. Adhesive and Hardener must be stored in cool and dry indoor room under 40°C. The expired time is one year in unopened situation.
10. Please keep good air circulation in working place to avoid harming health due to long-term breathing in solvent. If chemicals splash into eye or on skin accidentally, immediately flush contacting area by huge amount of water then send to medical treatment.