

Solvent-free adhesives for manufacturing flexible packaging laminates more sustainably

# SONGWON is a technology expert in sustainable laminating adhesives.

Developed with an eye on sustainability, our twocomponent polyurethane solvent-free adhesive for flexible packaging laminates can be widely used by film converters to improve operational efficiency and profitability thanks to their excellent physical and technical properties.



It's all about the chemistry™

Film converters benefit from SONGWON's extensive industry experience in sustainable, flexible packaging.

### **Eco-friendly**

- Solvent-free
- Significant energy savings
- Reduces adhesive waste

## Higher productivity



- High bond strength is obtained within just a few hours through fast curing
- Slitting can be done within 24-72 hrs at room temperature or at higher temperatures (ca. 50°C) within 24 hrs
- Processing is facilitated by long pot life

### Increased profitability



- Reduced coating weights and film lamination costs due to good wetting properties
- Value added throughout the chain due to enhanced appearance from exceptional film transparency
- Excellent lamination bonding strength on various plastic films (especially PET, nylon, OPP, LLDPE and CPP)

# Highly sustainable HI-THANE<sup>™</sup> laminating adhesives create significant value for film converters while increasing both productivity and profitability.

HI-THANE<sup>™</sup> A-7332 / HI-THANE<sup>™</sup> A-6200 is simple to process and handle and allows fast curing at room temperature. The equipment is easy to clean and since the adhesive is solvent-free and 100% reactive, less energy is used during application, curing and transportation than in conventional systems. These properties and features help to improve sustainability.

HI-THANE<sup>™</sup> A-7332 with HI-THANE<sup>™</sup> A-6200 curing agent is a two-component, solvent-free polyurethane adhesive system for flexible packaging laminates. It is designed for printed or unprinted, metallized and laminate structures consisting of polyethylene terephthalate (PET), biaxially oriented polypropylene (BOPP) and polyamide (PA) used for printing or barrier films as well as foil used for barrier films and linear low-density polyethylene (LLDPE) and cast polypropylene (CPP) films used for sealing during pouch manufacture.



# SONGWON's HI-THANE™ A-7332 with HI-THANE™ A-6200 solvent-free adhesive

| Properties                   | <b>HI-THANE™ A-7332</b>               | HI-THANE™ A-6200                      |
|------------------------------|---------------------------------------|---------------------------------------|
| Chemical nature              | Isocyanate component                  | Hydroxyl component                    |
| Appearance                   | Slightly yellowish transparent liquid | Slightly yellowish transparent liquid |
| Total solid content (%, w/w) | 100                                   | 100                                   |
| Viscosity 40°C (cps)         | 400 ~ 1000                            | 400 ~ 1000                            |
| Density 20°C (g/cm³)         | 1.14                                  | 1.07                                  |
| Mixing ratio (by weight)     | 100                                   | 54 +/- 3                              |

### Storage conditions



The materials should be stored in closed containers in a dry, cool place indoors at temperatures of  $5^{\circ}C - 40^{\circ}C$ .

### Shelf life



The laminating adhesive system HI-THANE™ A-7332 with HI-THANE™ A-6200 is stable for 9 months and 12 months respectively, provided the products are stored under the above conditions.

The laminating adhesive system, especially HI-THANE<sup>™</sup> A-7332, should be used within a short time and opened containers immediately resealed after use in order to prevent any quality deterioration.







For further information, please go to:

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SONGWON provides customers with warranties and representations as to the chemical or technical specifications, compositions and/or the suitability for use for any particular purpose exclusively in individual written agreements.

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