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Polyurethane adhesives and ink binders – discover SONGWON's environmentally sound solutions

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Did you know that the overall costs of coating a square meter of substrate with solvent free adhesives can be three times lower than those incurred with solvent based products? And that's in addition to their environmental benefits and excellent performance.

SONGWON's latest environmentally compatible technologies are designed to give manufacturers of plastic film for packaging competitive edge and help them meet their end-use requirements.

HI-THANE™ laminating adhesives

There is more to the cost of an adhesive than just the price of conversion or of energy consumption in application. The overall coating costs of solvent free adhesives can be three times lower per square meter of substrate than those of solvent based products. To make a realistic calculation, the Life Cycle Inventory (LCI) needs to be taken into account. This involves the quantification of energy and material inputs as well as the environmental impacts of a material or operation throughout its life cycle. The LCI shows that much less energy is consumed in the transportation of solvent free adhesives, for example,



because fewer drums are shipped. This also means the converter occupies a smaller storage area and has fewer drums to handle and recycle or dispose of.

SONGWON has developed a range of solvent free adhesives for flexible packaging that are not only economically viable but also high performance, catering for a wide range of customer needs and meeting today's EHS standards. Fast curing enables high bond strength to be achieved within 1~2days, allowing slitting in 12-24 hours and quicker laminate turnover.

HI-THANE™ A-7332 + HI-THANE™ A-6200 solvent free adhesive resins for flexible packaging

This solvent free, two pack, polyurethane (PU) adhesive system can be used for food pouches, wet wipes and film applications, including vacuum packing, and more. HI-THANE™ A-7332 and HI-THANE™ A-6200 meet FDA 21 CFR 177.1390 extraction limit requirements and are stable at temperatures as low as minus 20°C.

HI-THANE™ polyurethane ink binders

SONGWON's extensive portfolio of cutting edge HI-THANE™ PU ink binders is suitable for gravure and flexographic printing inks used in plastic film applications. The broad range enables the design of customized printing ink formulations.

Surface printing applications include paper, polypropylene (PP) and polyethylene (PE) packaging for bread, rice snacks and dried food. Polyethylene terephthalate (PET), nylon (NY) and oriented polypropylene (OPP) packaging for numerous kinds of snacks, boiled and retort foods, cold foods are generally reverse printed.

HI-THANE™ PU ink binders meet the requirements of the printing industry on PU. They promote good printability, are highly resistant to heat, and have excellent solvent retention as well as good anti-blocking properties.

The excellent bonding strength, very high color strength and good anti-blocking properties of HI-THANE™ ink binders in gravure and flexographic printing make them highly suitable for pigment grinding and retort applications.

Alcohol based PU ink binder resins

SONGWON offers a comprehensive range of solvent free ink binder resins for gravure and flexographic printing inks that enables the formulation of customized printing ink formulations. The products contain no methyl ethyl ketone (MEK) or toluene, have outstanding resolubility and solvent retention, and are highly compatible with co-binders such as vinyl and nitrocellulose resins. Their excellent bonding strength makes them highly suitable for pigment grinding.

HI-THANE™ A-9000, A-9135T, A-9107T and A-9000N-1 all have even outstanding alcohol dissolvability properties.

HI-THANE™ A-9107T is an aliphatic, alcohol based urethane ink binder suitable for use in the manufacture of flexographic and gravure printing inks. HI-THANE™ A-9135T is an aliphatic, ethyl alcohol (ETOH) based urethane ink binder suitable for use in the manufacture of flexographic and gravure printing inks. With their very good anti-blocking properties and high color strength, these two products are particularly recommended for retorting applications.



More products in the pipeline

SONGWON is working continuously on the development of products and processes that give manufacturers of plastic film for packaging competitive edge and help them meet their end-use requirements.