



ALCOLEX 290

Description

ALCOLEX 290 is a medium viscosity, high quality vinyl acetate ethylene (VAE) based packaging and laminating adhesive that offers several distinct advantages over conventional vinyl acetate based packaging adhesives such as fast setting speed, excellent rheology profile for clean high speed running, and superior adhesion to difficult paper, board, other surfaces. ALCOLEX 290 meets Code 21 of the U.S. FDA Regulations 175.105 (adhesives), and is suitable for indirect food contact. Available in blue colour for applications requiring a visible glue line, such as bonding of white board.

Features and benefits

- Excellent adhesion properties - bonds a variety of coated paper and board surfaces
- Fast setting - can run machine at high speeds
- Clean machine running - no splashing on high speed applicators; low build up of glue on nozzles
- Low application weight - good mileage, economical
- Good wet tack - reduced tail lift (dog-earring)
- Resists temperature extremes - suitable for service temperatures between -10°C to 100°C
- High solids - minimal effect on plybond
- Plasticizer migration resistance - long term bond durability
- Phthalate and solvent free - low environmental impact, low VOC, non-toxic, non-flammable (wet state)
- Water-based formulation - cleans up easily with water
- Meets FDA 175.105 - suitable for indirect food contact

Applications

Ideal for side seaming applications, particularly those involving difficult surfaces e.g. decorative boxes. Also ideal for laminating of foam, textiles and various fabrics. Suitable for paper and board laminating, carton closing, bookbinding (padding and casing in), envelopes, cigarette tipping and seaming, blister packaging, photo mounting, etc. Ideal for most packaging applications where improved adhesion, faster setting, and or cleaner machining is required. ALCOLEX 290 is particularly suited for the following application equipment : Chancel, Valco, Mactron nozzles, and various methods of roller application..

Adhesion

Excellent adhesion to various types of paper, paper-backed foil, and board e.g. kraft, baywhite, clay coated, printed and varnished.

Limitations

ALCOLEX 290 should not be used to adhere wax coated papers and plastics. At least one surface must be porous. Do not use when temperature, glue or materials are below 4°C.

Safety instructions

Although ALCOLEX 290 is non-toxic, safe handling practices should be implemented to avoid irritating sensitive skin. It is advisable to wear gloves in order to avoid direct skin contact. If glue comes in contact with skin or eyes, flush thoroughly and immediately with water. If irritation continues, seek medical attention. Glue is slippery when wet, so care should be taken when cleaning spillages that occur. Refer to our Safety Data Sheets for further toxicological information & comprehensive handling instructions.

Surface preparation

- The surface must be clean, dry, and free from all loose materials, dust, dirt, rust and any other contaminants. When gluing two-ply linerboard, ensure that the plybond is sufficiently strong and meets specification. Ensure that paper has sufficient porosity to allow for glue penetration by checking and ensuring that the Cobb value meets specification
- Poor surface preparation may result in the delamination of the glued joint

Instructions for use

- Ensure that surfaces are prepared as above
- Stir adhesive before use
- Ensure that the ambient temperature and the temperature of the adhesive and paper are above 4°C
- Apply the adhesive to one surface using a nozzle, roller, or wheel applicator. ALCOLEX 290 is suitable for use with automated centralized glue stations
- A glue spread rate of 60 – 120g/m² is necessary for side seaming application. For paper laminating, a lower spread rate of approximately 30 - 60g/m² should be sufficient. Lower spread rate will lead to glue starvation, pre-drying and eventually poor adhesion. Higher spread rates may lead to creases, misalignment, long drying times and slower production speeds.
- Spread rates are highly dependant on ambient conditions and it may be necessary to increase spread in conditions of relative humidity lower than 45% and temperatures above 30°C. Lower temperatures and higher relative humidity may therefore justify a lower spread rate
- The glued surfaces must be assembled within the open time of the adhesive. The open time is the time between glue spreading and closing of the assembly. The open time of ALCOLEX 290 is approximately 40 seconds (60g/m² spread rate, 23°C, 65% RH). Open time is influenced by the glue spread rate, environmental conditions and substrate porosity. Open time is reduced by high temperature, low humidity, low spread rate and porous substrate. Depending on the application equipment, the distance between the point of adhesive application and the point of assembly, the temperature may have to be increased or the glue spread rate lowered to increase production line speeds

Cleaning

- Machines and tools can be cleaned with water. Warm soapy water will increase cleaning effectiveness
- Nozzles, transfer lines and in-line filters should be cleaned regularly
- It is recommended to regularly coat areas where adhesive contamination can be either detrimental or unsightly on the equipment with ALCOLIN RELEASE AGENT. The release agent will prevent the adhesive from sticking to the equipment and will help dried glue to flake off quickly and easily
- Effluent should be dealt with as per local regulations and if none exists, it is recommended to mix the effluent with sawdust and dispose of when dried

Storage stability

ALCOLEX 290 has a shelf life of at least 12 months if stored in a cool (below 25°C), dry place in its original moisture-tight container. The glue should not be stored below 0°C or above 30°C. If the material is kept beyond the recommended shelf life, it is not necessarily unusable. A check should be performed to observe whether the product has not separated, thickened, or shows signs of bacterial degradation (bad smell, discoloration and low viscosity). To maximize the shelf life of the opened container, ensure that the packaging is closed to create an airtight environment when not in use. If the packaging is left open for long periods, the glue will thicken and form a skin on the surface, which can damage pumps and block filters

Product packaging

- 25kg Buckets
- 200kg Drums
- 1000kg Bulk Containers

Physical data

Type	Vinyl acetate ethylene copolymer
Appearance	Viscous white/blue liquid, drying to a tough, elastic clear/translucent blue glue line
Density	Approximately 1.06g/cm ³
MFFT	Approximately 4°C
PH	Approximately 4.7
Solids	Approximately 55%
Viscosity	Approximately 3900cps (#3, 20rpm, 23°C)

Application data*

Minimum application temperature	4°C
Spread rate	Approximately 60 – 120g/m ² for side seaming Approximately 30 - 60g/m ² for laminating
Open time (23°C at 65% RH; 60g SR)	Approx 40 seconds
Initial set (23°C at 65% RH; 60g SR)	Approx 15 – 30 seconds

**Please refer to "Instructions for Use" section for further details*

The above information is only offered, as a guide to the use of this product. Furthermore, users should satisfy themselves that it is suitable for their needs. Since we have no control over the conditions under which it is used, we cannot accept responsibility for problems caused by the use and/or application of this product.

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