



ADCOTE™ L 86-145 / C-33

Description ADCOTE™ L 86-145/ C-33 is a solvent-based two-component polyurethane adhesive system with high initial tack, based on aliphatic isocyanates.

It has excellent product, heat and chemical resistance and is suitable for sterilizable, boil-proof and deep drawable laminates.

Typical Applications Lamination of transparent films, SiOx deposited films, metalized and aluminum foil containing structures with and without sandwich printing.
 Suitable for high temperature laminations, e.g. autoclave, steam sterilization applications, and recommended for retort packaging applications.
 Used for a wide range of applications including hot fill and boil-in bag.

Suggested Substrates Film to foil laminations.
 Metalized films.
 Polyester (PET).
 Silicon oxide (SiOx) coated films.
 Structures containing aluminium.
 Substrates should be printed with suitable inks for lamination.
 Treated polyethylene (PE), (minimum 38 dyne/cm).
 Structures with and without reverse printing.

Typical Physical Properties	Adhesive	Coreactant	Unit
Component Type	OH	NCO	
Solids Content	61	100	%
Viscosity (25°C)	1200 to 4500	2000 to 4000	mPa·s
Density	1.11	1.16	g/cm ³
Volatile Solvent	Ethyl Acetate	--	
Mix Ratio by Weight (PBW)	100	6.0	
Wet Appearance	<ul style="list-style-type: none"> • Clear • Colourless to Slightly Yellow • Liquid 	<ul style="list-style-type: none"> • Liquid • Slightly Amber 	

Recommended Processing Guidelines

This system can be applied at a solid content of 25 to 35% by reverse gravure, direct gravure or with smooth roller system.
 The product can be diluted to the desired solid content with urethane grade solvents like: Methyl Ethyl Ketone (MEK), Ethyl Acetate (EAc), Acetone.
 The quantity of solvent to be added for the different final solid is shown in the enclosed dilution table.

General Comments

Dow's Technical Service is ready to supply assistance in regards to the correct use of our products.
 Interaction may occur with other components of the structure. Inks, retained solvents from any source, substrates, additives, coatings and the packed product are some of the components that may cause a property change of the total structure.
 Before regular production, the end user is responsible to verify the suitability and performance properties of the total construction for the intended end use application, including the suitability of the process, construction and components.
 The reported specification data might be subject to change.

Recommended Application Weight

Apply 1.5 to 5.0 g/m² dry, depending on substrate, printing and application.

Drying Guidelines

An increasing temperature profile in multi-zone dryers is recommended.
 Dry properly with sufficient amount of heated air at adjusted temperature range of 60 to 100°C to evaporate solvents at given production speed.

Nip Temperature

For a good lamination adhesion bonds, nip temperature should be 60 to 90°C.
 The rubber roll in the nip with hardness of 85 Shore A or greater is recommended.

Slitting / Rewind Time

Slitting and rewind is possible after 12.0 to 24.0 hr at 21°C (70°F).

Curing Time

Converters should verify appropriate cure times and conditions for their individual application.

The cure rate of laminations made with this adhesive is dependent on the temperature and relative humidity at time of lamination and within the storage or holding area.

The curing process is normally completed 2.0 day after lamination at 45°C and may be influenced by the type of film used, applied weight and by the storage conditions.

The curing process is normally completed 7.0 day after lamination at 25°C and may be influenced by the type of film used, applied weight and by the storage conditions.

Approximate Pot Life

The mixed Pot Life of the product is approximately 8.0 hr at 30 to 35% of solids content. It can vary based on environmental temperature and humidity conditions.

Suggested Cleanup Guidelines

A proper cleaning procedure should be implemented and practiced as part of the machine operation.

After finishing work, the equipment should be cleaned immediately with organic solvents like ketone or acetate, or similar organic solvents before the product's cure progresses too far.

Storage and Shelf Life Guidelines

The expiry date of each product is the date reported on the label of the package.

The product may be stored up to stated expiry date provided that the product is stored in a dry and cool, well ventilated place between 5 - 35°C (41 - 95°F) unopened in the original shipping container.

Opened containers should be used as quickly as possible.

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

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Published: 2020-12-03

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