# J.V. Converting Company, Inc.

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## PRODUCT DATA SHEET DC-UHB45FA-W

## "Ultra-High Bond" Tape WHITE FOAMED ACRYLIC TAPE

#### DESCRIPTION

A **WHITE** Foamed Acrylic adhesive with a special composition giving excellent all around bonding properties and unique characteristics that allows for very high performance in the most demanding of applications. The pressure sensitive acrylic composition provides for very good tack, excellent adhesion to variety of surfaces and high shear strength performance. Tape is carried on a RED, release coated Polyethylene Liner that is easily removed.

#### APPLICATIONS

- Ideal for structural bonding applications in the transportation industry i.e. fixing body and roof panels in the bus and truck industry, mounting / fixing car side molding and emblems.
- Bonding of plastic and wooden window glazing bars (muntin bars), fixing architectural cladding panels (external & internal).
- Used as a mounting tape in the illuminated sign industry, for fabricating road signs, joining of metals and plastic trims in furniture construction and architectural applications.

#### HOW TO APPLY FOR BEST ADHESION RESULTS

- Surfaces to be bonded must be clean, dry, and free from dust and loose particles. Preferably use a solvent (IPA) to prepare surface.
- Must apply sufficient pressure to tape to ensure adhesive "wet-out". Bond strength builds with dwell time optimum strength achieved after 24 hours.
- Low energy surfaces such as plasticized plastics, may require a primer to surface to ensure strong bond.

#### PHYSICAL PROPERTIES

Construction	WHITE foamed acrylic w/ Red PE liner	
Thickness	1.1mm (43.3 mils) exclusive of liner	
180° Peel Adhesion (SST – ASTMD-330)	10.1 lb/in	
Tensile Adhesion (T-BlockTest Alum – ASTMD-897)	141 lb/in <sup>2</sup>	
Dynamic Shear (To SST - ASTMD-1002)	81 lb/in <sup>2</sup>	
Temperature Resistance (Elevated)		
Short Term (4 hr. at max temp. w/ 500gm load)	up to 320°F	
Long Term (166 hr. at max temp. w/ 1kg load)	up to 212°F	
Cold Temperature Resistance	down to -40°F	
UV Resistance	Good	

#### COMPETITIVE PRODUCTS (similar in fit, form & function):

3M 4950,4622,4945, 4946. SealKing TB 7010

**NOTE**: The physical properties listed above are typical test results obtained from a series of laboratory tests and should not be used for the purpose of writing specifications. Before using this product, user shall determine the suitability of the product for his/her use; and user assumes all risks and liabilities in connection therewith. All test procedures used are in accordance with ASTM and PSTC methods.

## Relative Adhesion Guideline – Various Substrates

AT/DC/FA-UHB and URA-45 Acrylic Tapes

SUBSTRATE MATERIAL	RELATIVE ADHESION	PRIMER USEAGE?
Aluminum	Excellent	Not Necessary
Stainless Steel	Excellent	Not Necessary
Copper	Excellent	Not Necessary
Zinc	Excellent	Not Necessary
Tin	Excellent	Not Necessary
Lead	Excellent	Not Necessary
Anodized Aluminum	Excellent	Not Necessary
Painted Metal	Excellent	Not Necessary
Kapton (Dupont)	Very Good	May Need Primer
Nylon	Very Good	May Need Primer
Epoxy Paint	Very Good	May Need Primer
Alkyd Enamel	Very Good	May Need Primer
Polyester	Very Good	May Need Primer
Polychloroprene	Very Good	May Need Primer
Polyurethane	Very Good	May Need Primer
Polycarbonate (GE Lexan)	Good	Primer Recommended
Polyvinyl Chloride (PVC)	Good	Primer Recommended
ABS	Good	Primer Recommended
Noryl (GE)	Good	Primer Recommended
Acrylic	Good	Primer Recommended
Polyvinyl Acetate (PVA)	Good	Primer Recommended
Polystyrene	Good	Primer Recommended
Ethylene Vinyl Acetate (EVA)	Good	Primer Required
Polyethylene (PE)	Good	Primer Required
Polypropylene (PP)	Good	Primer Required
EPDM Tedlar	Good	Primer Required
(DuPont)	Good	Primer Required
Silicone	Poor (ATP Butyl	
Teflon (DuPont)	Recommended) Poor (ATP Butyl Recommended)	

## 1. Substrate Evaluation

Acrylic adhesive is suitable for bonding a variety of substrates, including many plastics, composites, sealed wood and metals. Low energy surface materials such as polyethylene, polypropylene, silicones and Teflon can be a difficult surface in which to bond. Thorough evaluation is recommended when bonding to any questionable surface. An adhesion promoter (primer) for use with pressure sensitive acrylic adhesives may be necessary to facilitate proper bonding and are available.

## 2. Preparation of Substrate

The substrate to be bonded should be cleaned with an appropriate solvent; preferably IPA (isopropanol) no more than 15 minutes prior to bonding of acrylic adhesive backed part. To ensure removal of all contaminants without leaving any residue use a clean, lint-free wiping cloth or disposable cloth (never recycled rags). Other solvents such as hexane, heptane or methanol may be suitable for cleaning various substrates after thorough evaluation. The substrate must be thoroughly dry through evaluation of the solvent with radiant heat, hot air dryers or with time before bonding acrylic backed parts.

Insure optimum substrate temperature, never below 60°F (15°C) at application time.

Store acrylic adhesive backed parts to be bonded at no less than room temperature to avoid moisture condensation on the acrylic adhesive.

### 3. Application of Adhesive Backed Part to the Substrate Insure optimum application temperature of 50°F to 100°F (10°C to 38°C).

Remove the protective release liner from the acrylic tape immediately prior to applying the part to be bonded, being careful not to contaminate the acrylic adhesive.

Apply the part to be bonded without entrapping air between the tape and the substrate with a recommended minimum application pressure of 15 pounds per inch of tape width to achieve adhesive to substrate contact and maximum bond strength.

#### JV Converting Company Warranty

We warrant our products to meet our published physical properties at the time of sale when tested according to our standards. User shall determine the suitability of the product for its intended use and assume all risk and liability. WE SHALL NOT BE LIABLE FOR ANY INJURY, LOSS OR DAMAGE, BEYOND PRODUCT REPLACEMENT DESCRIBED IN THIS LIMITED WARRANTY, AND IN NO EVENT SHALL WE BE LIABLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES.

Any and all claims that a product is defective must be made in writing within thirty (30) days after discovery of the defect and in no event more than one (1) year after the original shipment of the product by us. Failure to timely notify us of any claim constitutes an irrevocable waiver of such claim regardless of the circumstances. THIS LIMITED WARRANTY IS THE USER'S SOLE REMEDY AND IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.