

# DuPont™ Betafuse™ 647 Laminating Adhesive

## One-Part Urethane Adhesive for Semi-Continuous Laminators

### FEATURES/BENEFITS

#### Description

DuPont™ Betafuse™ 647 Laminating Adhesive is a one-part, moisture-cure urethane adhesive designed for semi-continuous laminators. Betafuse™ 647 is one product in the full line of Betafuse™ Laminating Adhesives designed for semi-continuous and continuous laminators.

#### Ease of Use

Betafuse™ 647 is easy to handle, use and apply. Some features include:

- Solvent-free liquid with good flow and transfer properties
- Bonds strongly to a wide variety of materials
- Excellent resistance to heat, cold, and moisture

Common applications for Betafuse™ adhesives include:

- Structural insulated panel (SIP) adhesion
- Garage doors
- Walk-in coolers & freezers
- Architectural panels
- Sunroom panels
- RV lamination
- Miscellaneous panel lamination

#### Available Sizes

Betafuse™ 647 is sold in totes holding 2400 lbs (1089kg) of product.

### PROPERTIES

Betafuse™ 647 Laminating Adhesive exhibits physical properties as indicated in Tables 1 and 2 when tested as represented. Review all instructions and (Material) Safety Data Sheet ((M)SDS) before use. Please contact DuPont at 1-866-583-2583 when additional guidance is required for writing specifications that include this product.

**TABLE 1: Typical Physical Properties for Betafuse™ 647 Laminating Adhesive**

Property	Typical Value
Appearance	Syrupy liquid
Color	Light straw
Solids, %	100
Viscosity (Brookfield RVT, #4 Spindle, 10 rpm), cPs @ 25°C	9200 nominal
Working and cure time	Refer to Table 2
Density	9.26 lbs/gal (1.11 kg/L)
Flash point (Setaflash), °F	>200 (93°C)

**TABLE 2: Cure Schedule\* for Betafuse™ 647 Laminating Adhesive**

Application rate of 12 g/sq.ft. adhesive (129 g/sq.m.) and 1 g/sq.ft. water (11 g/sq.m.)

Temperature	Maximum Working Time	Press Time
60°F (16°C)	181 Seconds	395 Seconds
65°F (18°C)	172 Seconds	375 Seconds
70°F (21°C)	162 Seconds	358 Seconds
75°F (24°C)	154 Seconds	341 Seconds
80°F (27°C)	146 Seconds	326 Seconds
85°F (29°C)	139 Seconds	311 Seconds
90°F (32°C)	132 Seconds	296 Seconds
95°F (35°C)	125 Seconds	285 Seconds
100°F (38°C)	119 Seconds	272 Seconds

\* Panels must be under pressure within the stated maximum working time. This information is based on a continuous thin film and is to be used as a guideline. Actual parameters must be verified at the facility where the product is to be used.

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## INSTALLATION

### Use Conditions

A cure schedule detailing maximum working time and press time at varying temperatures for **DuPont™ Betafuse™ 647 Laminating Adhesive** can be found in Table 2.

### Application

**Betafuse™ 647** is designed to be applied via extrusion-type equipment in order to minimize atmospheric moisture contact. Water mist on the adhesive surface is recommended to ensure uniform cure rate.

### Notice

ICC Evaluation Service, Inc. (ICC-ES) has confirmed that **Betafuse™ 647** complies with the provisions of the 2021 International Building Code (2021 IBC), and the 2021 International Residential Code (2021 IRC). This confirmation, as evidenced in ICC-ES evaluation report ESR-1023, provides guidance to code officials faced with approving the use of **Betafuse™ 647** these codes. The evaluation report is available online at [www.icc-es.org](http://www.icc-es.org).

Contact your DuPont sales representative or local authorities for state and local building code requirements and related acceptances.

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## HANDLING

**WARNING: For Professional Use Only.** Read and follow the entire Handling section of the Safety Data Sheets (SDSs, formerly MSDSs or Material Safety Data Sheets) carefully before use. The information below is designed to protect the user and allow for safe use and handling of DuPont™ products. Follow all applicable federal, state, local and employer regulations.

### Precautionary Statements

- **Betafuse™ 647 Laminating Adhesive** is moisture reactive and must be protected from undue exposure to moisture.
- Use only in well ventilated area away from open flames, sparks, or excessive heat.
- Avoid contact with skin and eyes. Wear protective gloves/ protective clothing/ eye protection/ face protection.

### Clean Up and Purge

- To clean up **Betafuse™ 647** before it has cured, use DBE (dibasic ester) or propylene carbonate.
- Use all solvents with care. Make sure there is adequate ventilation. Read and understand the MSDS provided with the solvent.

### Shelf Life and Storage

- Ideal storage temperatures for **Betafuse™ 647** are between 50-75°F (10-24°C).
- When stored as directed, and in the original unopened containers, at 70°F (21°C), **Betafuse™ 647** has a shelf life of 1 year from the date of manufacture.
- Containers of **Betafuse™ 647** should be stored under cover and protected from contact with rain or snow. Water should not be allowed to accumulate on the totes where it can be drawn into the containers.
- Once opened, containers of the adhesive should be used immediately or protected by a blanket of dry nitrogen and sealed.

### Disposal

Dispose of any residual DuPont™ product, coated debris, or solvent in accordance with applicable federal, state, and local government regulations.



**For more information visit us at  
[building.dupont.com](http://building.dupont.com)  
or call 1-866-583-2583**

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