Flexbase™ T1650 Electronic Materials Flame-Retardant Modified Acrylic Adhesive Unsupported Bonding Adhesive

Description

Sheldahl Flexbase T1650 products use our proprietary flame-retardant, high temperature, modified acrylic adhesive on a release liner, creating an isolated adhesive suitable for use as bonding-layer. T1650 tapes are engineered for use in flex circuitry applications where soldering and temperature resistance are key. Sheldahl materials are able to be processed in rolls.

Features

- **Adhesive:** Flame-retardant modified acrylic.
- **Consistent**: Sheldahl's superior manufacturing process ensures consistent adhesive thickness control.
- **Processing:** High quality flexible circuits can be produced using standard manufacturing procedures.

Storage

Material stored in original packaging, at temperatures of 40-80ºF (4-26ºC), and below 70%RH will retain their properties for a minimum of 1 year.

Quality

Sheldahl products are manufactured using quality systems that conform to ISO, QS, and TS quality standards. Key product characteristic are tested and monitored in accordance to IPC standards. Certifications are available with product shipments.

Constructions

- **Adhesive Thickness**: 0.5 - 3mil (12.5 - 75µm)
-
- **Width**: Standard roll width is 24" (610mm)

Specialty thickness and widths available please contact your Sheldahl representative.

Contact Information:

USA: Telephone – 507-663-8344
Europe: Telephone – 33-387-847-477
Worldwide: Telephone – 507-663-8344

Come visit us at www.Sheldahl.com

Ordering Information:

When ordering please specify:

- Film thickness
- Adhesive type (flame-retardant or non flame-retardant)
- Adhesive thickness
- Adhesive on one side or both
- Roll width

Lamination Conditions:

	SAE	Metric
Platen temperature	365-385°F	185-195°C
Pressure	300-400 PSI	21-28 kg/cm^2
Time (at temperature)	50 - 60 min	50 - 60 min
Cool under pressure	≤ 120°F	≤ 48°C

**Oven-dry at 250-275°F (120-135°C) for >1 hour, prior to solder exposure.*

INFORMATION UPDATE

1150 Sheldahl Road
Northfield, MN 55057-9444 USA
T 507.663.8000 F 507.663.8545
www.sheldahl.com

PROPERTY TO BE TESTED AND TEST METHOD	IPC Test Requirements		Sheldahl Typical Mean Value*	
Peel Strength, minimum, lb./in. width, IPC-TM-650, 2.4.9	Shiny Cu	Treated Cu	Shiny Cu	Treated Cu
Method A as received	4.0	8.0	11.0	12.0
Method B as received	4.0	8.0	11.0	12.0
Method D After Solder Float	3.5	7.0	10.0	12.0
Flow, maximum IPC-TM-650, Method 2.3.17.1	5:1		2:1	
Volatile Content, maximum IPC-TM-650, Method 2.3.37	4.0		1.0	
Chemical Resistance percentage, IPC-TM-650, Method 2.3.2, A	80%		90%	
Solder Float, IPC-TM-650, Method 2.4.13, Method B	Pass		Pass	
Dielectric constant, maximum (at 1MHz), IPC-TM-650, Method 2.5.5.3	4.0		3.75	
Dissipation factor, maximum (at 1 MHz), IPC-TM-650, Method 2.5.3	0.05		0.03	
Volume Resistivity, minimum megohm-cm, IPC-TM-650, Method 2.5.17	10^6		10^9	
Surface resistance minimum, megohms, IPC-TM-650, Method 2.5.17	10^5		10^8	
Dielectric strength, minimum V/µm (V/mil), ASTM-D-149	39.37 (1000)		(2000)	
Fungus Resistance, IPC-TM-650, Method 2.6.1	Non-nutrient		Non-nutrient	
Moisture Absorption, maximum, percent, IPC-TM-650, Method 2.6.2.	6.0%		4.5%	
Flammability, 94 VTM-0	Pass		Pass	

*The information contained herein is based upon typical data, Sheldahl makes no warranties expressed or implied as to its accuracy and assumes no liability arising out of its use by others. The user should determine suitability of Sheldahl materials for each individual application.

INFORMATION UPDATE

1150 Sheldahl Road
Northfield, MN 55057-9444 USA
T 507.663.8000 F 507.663.8545
www.sheldahl.com