



Flexbase™ T1000 Electronic Materials Halogen-Free Thermoplastic Polyester Unsupported Bonding Adhesive

Description

Sheldahl Flexbase T1000 products use our proprietary halogen-free, thermoplastic, polyester adhesive on a release liner, creating an isolated adhesive suitable for use as bonding-layer. T1000 tapes are engineered for high bond strength to a variety of substrates. Sheldahl materials are processable in rolls.

Features

- **Adhesive:** Halogen-free thermoplastic polyester.
- **Consistent:** Sheldahl's superior manufacturing process ensures consistent adhesive thickness control.
- **Processing:** T1000 is thermally activated and allows for efficient processing with no drying time.

Storage

Material stored in original packaging, at temperatures of 40-80°F (4-26°C), and below 70%RH will retain their properties for a minimum of 5 years. Excessive exposure to heat and moisture may cause reduced shelf-life.

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 – 1.5mil (12.5 - 38µm)
- **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

PROPERTY TO BE TESTED AND TEST METHOD	Sheldahl Typical Mean Value*
Peel Strength, minimum, lb./in. - width, IPC-TM-650, Method 2.4.9 Method B as received	8.0
Flow, maximum IPC-TM-650, Method 2.3.17.1	6:1
Volatile Content, maximum IPC-TM-650, Method 2.3.37	1.0
Chemical Resistance percentage, IPC-TM-650, Method 2.3.2, A	90%
Dielectric constant, maximum (at 1MHz), IPC-TM-650, Method 2.5.5.3	4.6
Dissipation factor, maximum (at 1 MHz), IPC-TM-650, Method 2.5.3	0.13
Volume Resistivity, minimum megohm-cm, IPC-TM-650, Method 2.5.17	10 ¹³
Surface resistance minimum, megohms, IPC-TM-650, Method 2.5.17	3 x 10 ⁹
Dielectric strength, minimum V/μm (V/mil), ASTM-D-149	(100)
Fungus Resistance, IPC-TM-650, Method 2.6.1	Non-nutrient
Moisture Absorption, maximum, percent, IPC-TM-650, Method 2.6.2.	1.2%

*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.

Processing Recommendations

Roll-to-roll Laminating

	SAE	Metric
Hot Roll Temperature	300 - 330°F	150 - 165°C
Pressure (minimum)	100 PSI	7 bar
Line Speed	5-15 FPM	1.5-5 M/min.

Platen Press

Platen Temperature	300 - 330°F	150 - 165°C
Pressure	25 - 100 PSI	2-7 bar
Time (cool under pressure)	5 min to 105°F	5 min to 40°C

**Please note, actual values will depend on many factors including but not limited to: number of rollers, number of heated rollers, copper thickness and cable pitch, wrap angle of tape on heated rollers prior to lamination, run speed etc. Sheldahl suggests use of standard industry tests to confirm encapsulation and adhesion quality. Contact Sheldahl for assistance enhancing product performance.*