

# Thermal and Acoustical Systems

## dBLYte® Fine Fiber Blend



dBLYte® FFB is a high performance polyester fiber insulator composed of a unique blend of microfibers ideal for high performance thermal and acoustical insulating applications. The product provides very high acoustic absorption and thermal insulating properties to provide maximum performance at low thickness and weight. The unique fiber structure of dBLYte FFB provides high internal bond strength and product integrity – eliminating the need for facing materials or edge welding operations often required with melt blown systems

### Applications:

- Interior trim acoustic treatments for door panels, package trays, plastic trim, HVAC
- Instrument panel acoustic absorbers
- Exterior trim acoustic treatments for wheel wells and underbody panels
- Thermal insulation for headliner, wall panels, and floor systems

### Features/Advantages

- Low tooling costs
- Short lead-times for production
- Approved at several major OEM's
- Excellent acoustic absorption properties
- 100% Polyester material is fully recyclable
- Excellent thermal insulating properties
- Available in 2D die cut or 3D formed parts
- Resistant to interior and exterior automotive environmental conditions and operating fluids

### Typical Properties:

<b>Material Type:</b>	Polyester Fiber Insulation
<b>Thickness Range (SAE J1355)</b>	5 – 50 mm versions available
<b>Surface Weight Range (ASTM D3776)</b>	150 - 1500 g/m <sup>2</sup> (0.5-4.9 oz/ft <sup>2</sup> )
<b>Flammability (FMVSS302 / SAE J369)</b>	SE (Self Extinguishing)
<b>Moisture Absorption (38°C/95%RH)</b>	< 0.3%
<b>Thermal Conductivity (ASTM C518)</b>	0.032 W/m/°K - @ 24° C
<b>Internal Bond Strength (GME 60349)</b>	34 N/100 cm <sup>2</sup>
<b>Tensile Strength (ASTM D5034) 600gsm @ 20mm</b>	Mach. Dir – 23 N/cm <sup>2</sup> Cross Dir – 76 N/cm <sup>2</sup>
<b>Tear Resistance (ASTM D5733) 600gsm @ 20mm</b>	Mach. Dir – 154 N/cm Cross Dir – 62 N/cm
<b>*All Values Approximate</b>	



### Material Construction Options

- Polyester fiber core material in white, gray, or black
- Variety of surface cover options including Al Foil, Microperforated Aluminum, and AFR Scrims
- Pressure sensitive adhesive systems available for permanent attachment or as an assembly aid

Lydall Thermal / Acoustical, Inc.

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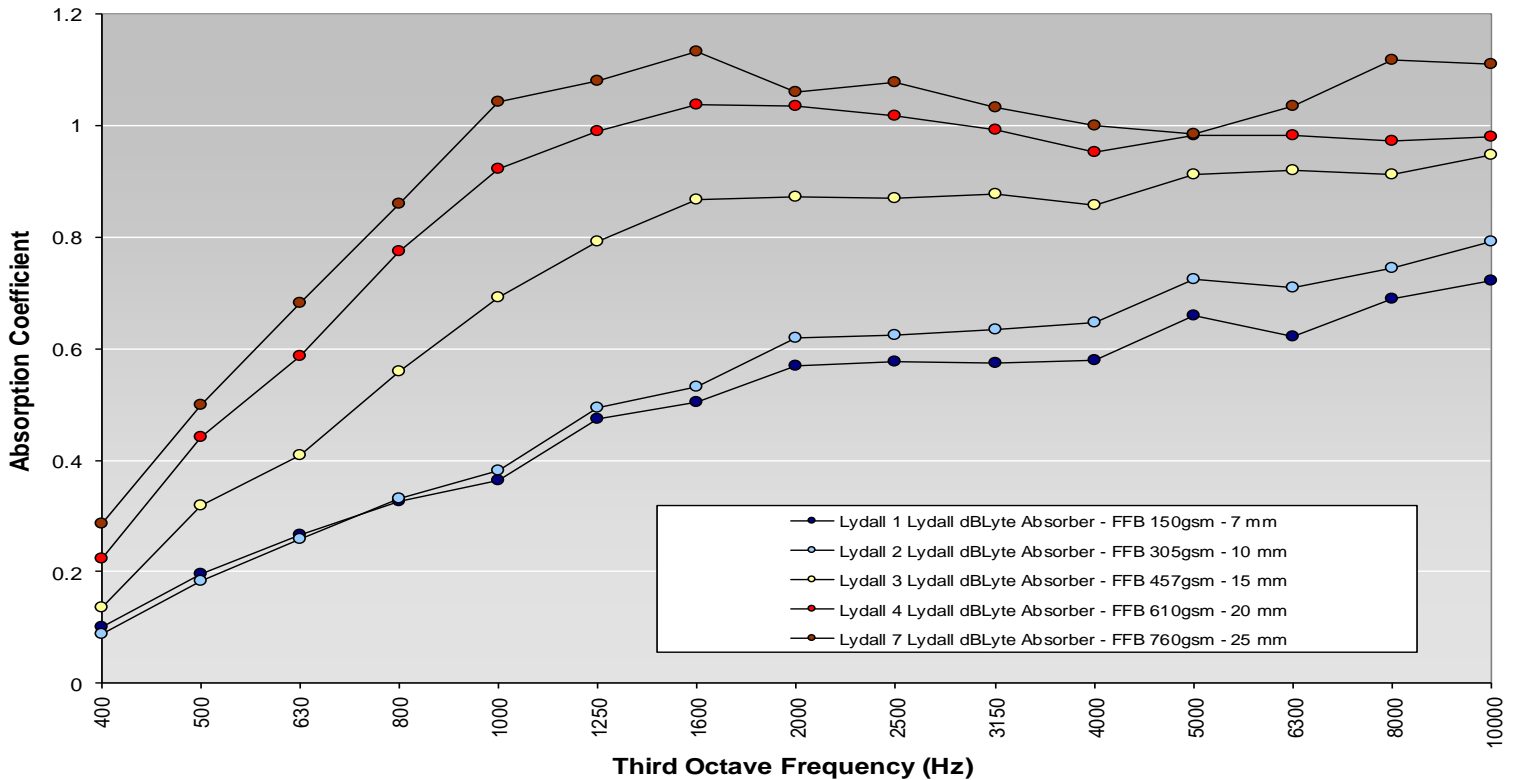
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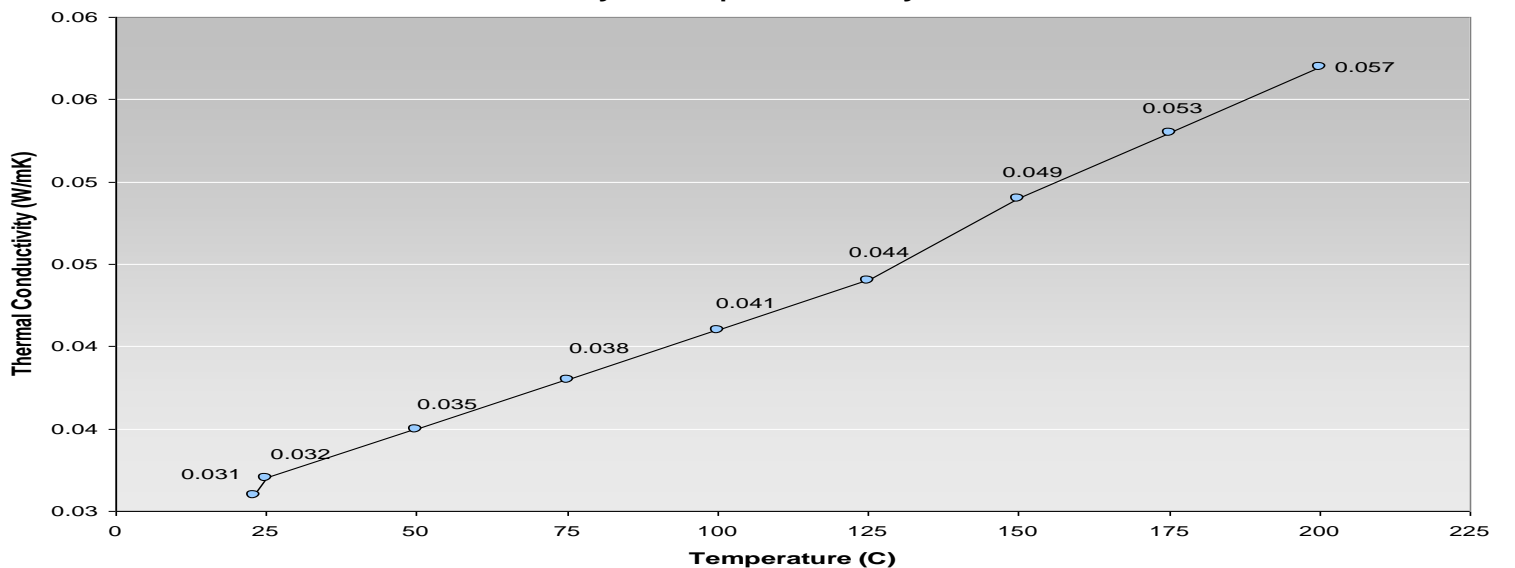
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### Lydall Random Incidence Sound Absorption



### Thermal Conductivity vs. Temperature - dBLYte Fine Fiber Blend



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