

ISOLOSS™ LS POLYURETHANE FOAMS

Versatile and durable foams customized for your needs.



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Aearo Technologies LLC, a 3M company.



Aearo
TECHNOLOGIES

ISOLOSS™ LS Polyurethane Foams

ISOLOSS™ LS Polyurethane Foams have a low compression set, high durability, and broad operating temperature ranges. These all-purpose foams come in a wide range of densities and thicknesses. A unique combination of design features allow for custom-made solutions for different applications.

ISOLOSS™ LS Foams come in bulk-roll format for efficient converting. The highly shock absorbent, and flame- and chemical-resistant foams provide strength and longevity in extreme environments with a wide temperature range.



Features

- Low compression set
- Broad service temperatures
- High internal strength
- Excellent shock control and cushioning

Applications

- Vibration damping and/or shock absorbing pad in electronic devices
- Gasketing and gap filling across many industries and market segments
- Protecting medical equipment
- High durability for gasketing, padding and sealing applications

Benefits

- Multiple densities allow design engineers to select among a wide range of consistent force deflection (CFD) curves, providing a tailored solution
- A broad service temperature range exceeds typical use requirements
- Rebound characteristics provide a soft and uniform spring-like mechanism to return components to their original state
- Low compression set ensures that the foam maintains its original structure throughout a product's lifecycle

Market Segments

- Industrial • HVAC • Appliance • Electronics
- Medical • Power Generation • Automotive

ISOLOSS™ LS Foams — Primary Applications

Gasketing

- Listed as Gasket & Seal Material UL File #MH17135
- 3M adhesive compatible
- Low compression set

Cushioning and Support

- Soft and supportive
- Multiple stiffnesses available
- Resilient

Energy Control

- Impact absorption
- Vibration damping
- Conformable to product design

LS Part Number Designation

Example: **LS-1025LM**

LS — Material Family

10 — Density (lb/ft³ or lcf)

25 — Thickness (hundreds of an inch)

LM/HM — Low/High Modulus

If no modulus rating is listed, the material is considered a standard modulus/stiffness for that density.

Thickness (in.)	Density (lb/ft ³)			
	10	15	20	25
0.03			LS-2003	LS-2503
0.06	LS-1006LM	LS-1506	LS-2006	LS-2506
0.09	LS-1009LM	LS-1509	LS-2009	LS-2509
0.12	LS-1012LM	LS-1512	LS-2012	LS-2512
0.19	LS-1019LM	LS-1519	LS-2019	LS-2519
0.25	LS-1025LM	LS-1525	LS-2025	LS-2525
0.37	LS-1037LM	LS-1537		
0.50	LS-1050LM	LS-1550		

Part Number	3M ID	Density / Durometer	Dimensions (W x L)	Ft ² per UOM	Material Thickness	MOQ	UOM
LS-1006LM	7100219940	10 lb/ft ³	4.5' x 300'	1350	0.06" (1/16)	1	Roll
LS-1009LM	7100229570		4.5' x 225'	1012.5	0.09" (3/32)		
LS-1012LM	7100219945		4.5' x 160'	720	0.12" (1/8)		
LS-1019LM	7100229562		4.5' x 100'	450	0.19" (3/16)		
†LS-1025LM	7100219943		4.5' x 80'	360	0.25" (1/4)		
LS-1037LM	7100229656		4.5' x 60'	270	0.37" (3/8)		
LS-1050LM	7100219944		4.5' x 60'	270	0.50" (1/2)		
LS-1506	7100219938	15 lb/ft ³	4.5' x 300'	1350	0.06" (1/16)	1	Roll
LS-1509	7100229561		4.5' x 225'	1012.5	0.09" (3/32)		
†LS-1512	7100219937		4.5' x 160'	720	0.12" (1/8)		
†LS-1519	7100229556		4.5' x 100'	450	0.19" (3/16)		
†LS-1525	7100219935		4.5' x 80'	360	0.25" (1/4)		
†LS-1537	7100229560		4.5' x 60'	270	0.37" (3/8)		
LS-1550	7100219936		4.5' x 60'	270	0.50" (1/2)		
LS-2003	7100219934	20 lb/ft ³	4.5' x 300'	1350	0.03" (1/32)	1	Roll
†LS-2006	7100219861		4.5' x 300'	1350	0.06" (1/16)		
†LS-2009	7100229559		4.5' x 225'	1012.5	0.09" (3/32)		
†LS-2012	7100219860		4.5' x 160'	720	0.12" (1/8)		
LS-2019	7100229558		4.5' x 100'	450	0.19" (3/16)		
LS-2025	7100219859		4.5' x 80'	360	0.25" (1/4)		
†LS-2503	7100219857	25 lb/ft ³	4.5' x 300'	1350	0.03" (1/32)	1	Roll
†LS-2506	7100219858		4.5' x 300'	1350	0.06" (1/16)		
LS-2509	7100229557		4.5' x 225'	1012.5	0.09" (3/32)		
LS-2512	7100219856		4.5' x 160'	720	0.12" (1/8)		
LS-2519	7100229555		4.5' x 100'	450	0.19" (3/16)		
LS-2525	7100219855		4.5' x 80'	360	0.25" (1/4)		

†Refer to UL 94 HBF file number # QMFZ2. E90847 for ISOLOSS™ LS Foam LS-1025LM, LS-1512, LS-1519, LS-1525, LS-1537, LS-2006, LS-2009, LS-2012, LS-2503, and LS-2506.

3M™ Laminating Adhesive Adhesion to ISOLOSS™ LS Foams

From climate-controlled offices to harsh outdoor environments, you need high-performance versatility that can withstand whatever conditions customers throw at your products. Whether you're bonding high surface energy substrates like metals and glass or difficult low surface energy materials like powder-coats and some composites, 3M has a wide variety of durable options for double-sided tapes. 3M offers solutions in standard roll and customer-converted forms to solve and optimize bonding and identification applications. 3M global experts and a network of converters help specify the right solutions to assist our customers in bringing their designs to life.

Compare bonding products based on the ISOLOSS™ LS Foams material in your application.

○ = Good ◐ = Better ● = Best

3M Adhesive and Tape	ISOLOSS™ LS Foam (Density 10lb/ft³)			
	LS-10XXLM	LS-15XX	LS-20XX	LS-25XX
3M™ Adhesive Transfer Tape 9775WL with 3M™ Acrylic Adhesive 300MP	●	●	●	●
3M™ Double Coated Tape 9832 with 3M™ Acrylic Adhesive 300MP	●	●	●	●
3M™ Adhesive Transfer Tape 6035PC with 3M™ Acrylic Adhesive 300MP	●	●	◐	◐
3M™ Double Coated Tape DCX-1018	◐	●	●	●
3M™ Adhesive Transfer Tape 9472LE with 3M™ High-Strength Acrylic Adhesive 300LSE	◐	◐	◐	○
3M™ Adhesive Transfer Tape 468MP with 3M™ Acrylic Adhesive 200MP	◐	◐	◐	○
3M™ Adhesive Transfer Tape 9472 with 3M™ Adhesive 300	●	●	●	●
3M™ Adhesive Transfer Tape 9627 with 3M™ Quick Bonding Adhesive 360	◐	●	●	●
3M™ Double Coated Tissue Tape 9456 with 3M™ Adhesive 340	◐	◐	◐	○
3M™ Double Coated Tape 9816	◐	◐	◐	○
3M™ Scrim Reinforced Adhesive Tape L1+RT	◐	◐	○	○
3M™ Adhesive Transfer Tape L2+T5	●	●	●	●
3M™ Adhesive Transfer Tape L3+T5	◐	◐	◐	○

Notes:

- The chart does not include every 3M Adhesive and Tape option. Foam adhesion results will be similar for tapes with the same adhesive family. Contact your 3M representative or view the 3M Converter Guide to learn more about 3M Laminating Adhesives.
- Testing used a modified version of ASTM D-1876 (T-Peel) test method. The "Good-Better-Best" rankings are based on the failure mode for the foam and not the adhesive bond. The technical data is only for adhesion to the foam. This data should not be used for specification purposes and needs to be evaluated with the substrates being used.

Safety Data Sheet: Consult Safety Data Sheet prior to use.

Regulatory: For regulatory information about this product, contact your 3M representative.

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