3M

High Temperature Laminating Adhesives

Brake pads, flex circuits, labels, and more...

efficient
attachment
with the
strength
to take the
stress and
the heat



Reliable high performance attachment for high te

3M[™] Adhesive Series 100: choice of characteristics for performance at temperatures ranging from 450°F to 540°F

Series 100 Adhesives are pressure sensitive formulations that perform reliably at various high temperatures. Each combines different characteristics for specific end use and processing requirements.

All attach immediately and invisibly without the work and appearance of mechanical fasteners or the dripping and drying of liquid adhesives.

100 High Temperature Acrylic

- Up to 450°F short term heat resistance
- Excellent solvent resistance
- High peel strength compared to other acrylic formulations
- Exceptional shear strength even at high temperatures
- Low outgassing

100MP High Performance Acrylic

- Up to 500°F short term heat resistance
- Outstanding solvent resistance
- Higher peel strength than 100
- Exceptional shear strength even at elevated temperatures

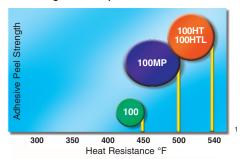
100HT Ultra High Temp Acrylic

 Similar to 100MP but with up to 540°F heat resistance and higher peel strength

100HTL Ultra High Temp Acrylic

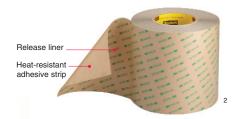
• Similar to 100HT but with high temperature resistant liner and carrier

Peel strength and Temperature resistance



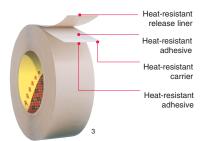
3M[™] Adhesive Transfer Tape with 100, 100MP, or 100HT

3M[™] Adhesive Transfer Tapes are rolls of pressure sensitive adhesive pre-applied to a release liner. For bonding, the tape is simply pressed, adhesive side down, to a surface and the release liner is peeled off. The exposed adhesive is ready to hold the mating surface.



3M™ Double-coated Tape with 100HTL

Double-coated tape features adhesive on both sides of a heat-resistant carrier. The carrier provides stability for handling. The liner used with 100HTL is also heat resistant for use in processing such as lead-free solder reflow.



Application Ideas

- Flexible circuit assembly and rigidizing
- Attachment of heat-generating components and heat sinks to PCBs



Appliance electronics



High temperature labels for appliances and under the hood in vehicles

- High temperature performance for military applications
- PCB tracking labels
- · Battery pack assembly and labels
- Fixture assemblies for automotive and other lighting
- LED back planes
- Automotive brake pad and shim assembly
- Audio system electronics and speaker assembly
- · Window blind attachment
- Machine bearing gasket attachment

See more on back cover

emperature applications and processes

Product Selection Guide

Adhesive Family	Product	Description/Application Ideas	Adhesive	Liner		Master	Specs	s Adhesion			Chem.	Temp.	Range	
			Caliper Mils	Туре	Type Caliper Si Mils	Size		Metal	HSE Plastic			Resist.	Low °F	High °F
100 High Temperature Acrylic	941	Graphic attachment for low odor appliance applications.	2	58# PCK	4.2	48" x 180 yd	UL	9	8	1	2	9	-40	450
	941N	Same as 941 on a heavy, lay-flat liner for kiss-cutting.	2	83# PCK	6.2	48" x 180 yd								
	965	Fuel line labels, excellent chemical resistance. Aerospace.	2	55# DK	3.2	48" x 180 yd								
	966	Meets NASA low volatility specs. Flex circuit attachment. High temp.	2	62# DK	3.8	48" x 180 yd	UL M ^H							
	9461P	Thinner version of laminating adhesive 9462P.	1	55# DK	3.2	48" x 360 yd								
	9462P	Laminating adhesive 966 on a caliper- controlled liner for rotary die-cutting.	2	55# DK	3.2	48" x 360 yd	UL							
100MP High Performance Acrylic	F 9460PC	High performance for flex circuit rigidizing, aerospace and industrial joining, and high temp labels.	2	58# PCK	4.2	60" x 180 yd	UL	10	7	1	2	10	-40	500
	F9469PC	High performance for PCB component and heat sink attachment, flex circuit assembly, brake shims, battery pack assembly, window blind labels.	5	58# PCK	4.2	60" x 180 yd	UL							
	F9473PC	High performance for gasket attachment, metal fabrication, brake pads, LED back planes, lighting fixtures, PCB component attachment.	10	58# PCK	4.2	60" x 180 yd	UL							
100HT Ultra High Temperature Acrylic	9082	Excellent heat resistance in high temp environments. For applications that require both higher processing and operating temperatures.	2	White DK Liner	3.2	48" x 180 yd		10	7	1	2	10	-40	540
	9085	Thicker version of 9082	5	White DK Liner	3.2	48" x 180 yd								
3M™ Douk	ole-coa	ted Tape												
100HTL Ultra High Temperature	9077	Same as 9082 but with heat- resistant liner and carrier for use in lead-free solder reflow.	2	White DK Liner	3.2	48" x 180 yd		10	7	1	2	10	-40	530

3M™ Performance Label Materials										
Facestock	Product Typical Performance Characteristics			ction Facestock Adhesive Type Liner	Roll Width Minimum Pre-Slit sizes (shown in red)	Print Method	Specs			
Polyimide White	7811	Offers ultra-high temperature performance. Easy readability of variable information and bar codes.	2.0 2.0 3.0	Matte Kapton® TC 100 50# Densified Kraft	12" 500' 6"	DMI	UL CSA RoHS			
	7812	Offers ultra-high temperature performance. Easy readability of bar codes. Thermal transfer printable.	3.0 2.0 3.2	Kapton®, Matte White 100 50# Densified Kraft	12" 6 "	TT	UL CSA RoHS			

Note: The technical information and data provided here should be considered representative or typical only and should not be used for specification purposes.



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Industrial and Transportation Business Converter Markets Industrial Adhesives and Tapes Division

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