

DATA SHEET

Arlon Product Number 99A90X008

PRODUCT DESCRIPTION

Primerless Thermabond®: Electrically insulating, thermally conductive, electronic adhesive. Bonds without primer.

Design / Construction

Liner: 0.001" FEP
Side 1: Uncured Silicone Rubber
Carrier: 0.003" PTFE coated fiberglass



Product Thickness

Overall Thickness:

Value

0.008"

Method

Arlon SQA-TMS-003

Product Color : Gray

TYPICAL PROPERTIES

<u>Silicone Compound Properties</u>		<u>Value</u>	<u>Method</u>
Tensile Strength	psi	365	Arlon SQA-TMS-008
Elongation	%	28	Arlon SQA-TMS-008
Poisson's Ratio	---	-0.5	---
Durometer	Shore A	87	Arlon SQA-TMS-014
Plasticity	mm	7.2	Arlon SQA-TMS-005
Specific Gravity	---	1.85	Arlon SQA-TMS-024
Thermal Conductivity @ 100C	W/m-K	3.0	Arlon SQA-TMS-022
Heat Capacity @ 100C	J/gK	0.85	Arlon SQA-TMS-052
Dielectric constant D_k @ 1 MHz	--	4.6	IPC TM 650 - 2.5.5.3
Dissipation factor D_f @ 1 MHz	--	0.0041	IPC TM 650 - 2.5.5.3
Elastic Modulus @ 1%	psi	9000	Arlon SQA-TMS-008
Glass Transition Temperature	°C	- 119	Arlon SQA-TMS-055
CTE (20°C - 160°C)	ppm/°C	52	ASTM E831
<u>Product Properties</u>		<u>Value</u>	<u>Method</u>
Dielectric Strength	volts/mil	1228	Arlon SQA-TMS-024
Lap Shear Strength	psi	140	Arlon SQA-TMS-018
Shear Modulus up to 100% strain	psi	265	Arlon SQA-TMS-018
Thermal Resistance (50C 3MPa)	m²*K/W	6E-5	Arlon SQA-TMS-054
Total Product Weight	g/m²	376	Arlon SQA-TMS-025

SHIPPING AND SHELF LIFE

Shipping Recommendation Arlon recommends refrigerated shipment for this product.

Product Shelf Life 6 months from DOM at 45°F +/- 3°F

Note: Shelf life is defined as the duration of time for which the product will meet the physical characteristics outlined on this page. It does not guarantee the product's usefulness in all applications.

PROCESSING RECOMMENDATIONS

Recommended Primers No primer required.

Recommended Cure Cycle 15 minutes @ 250°F and 0.345 MPa

Product Operating Temperature -148 to 400°F

The data presented in this document represent typical values for the production material. The data should not be used to write, or in place of, material specifications. Please verify that any printed hard copy of this datasheet is current by referencing: