



Arlon Silicones Technology

1100 Governor Lea Road, Bear, DE 19701
1.302.834.2100 • 1.302.834.4021 (Fax)

PRODUCT INFORMATION SHEET

Arlon Product Number

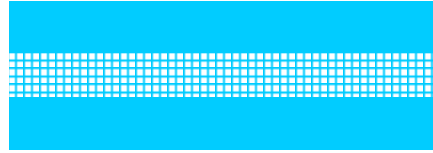
48991A010

PRODUCT DESCRIPTION

Generation IIa Thermabond[®] NP electrically insulating electronic adhesive. Bonds without primer.

Design / Construction

Liner: 1.5 mil polyethylene
Side 1: Uncured Silicone Rubber
Substrate: Style 1080 fiberglass
Side 2: Uncured Silicone Rubber
Liner: 1.5 mil polyethylene



Product Thickness

	<u>Value</u>	<u>Method</u>
Side one thickness:	0.0035"	Arlon SQA-TMS-003
Fiberglass substrate thickness:	0.0030"	Arlon SQA-TMS-003
Side two thickness:	0.0035"	Arlon SQA-TMS-003
Overall thickness:	0.0100"	Arlon SQA-TMS-003

Product Color : Light Blue

PHYSICAL PROPERTIES

Silicone Compound Physical Properties

	<u>Value</u>	<u>Method</u>
Tensile Strength psi	850	ASTM D 412
Elongation %	400	ASTM D 412
Poisson's Ratio ---	~0.5	---
Durometer Shore A	55	ASTM D 2240
Specific Gravity ---	1.45	Arlon SQA-TMS-024
Thermal Conductivity W/m-K	0.4	ASTM E 1530
Heat Capacity J/gK	1.14	E1461-01
Dielectric constant D_k @ 1 MHz	3.4	IPC TM 650 - 2.5.5.3
Dissipation factor D_f @ 1 MHz	0.005	IPC TM 650 - 2.5.5.3
Elastic Modulus psi	875	Arlon SQA-TMS-008
Glass Transition Temperature °C	< -100	ASTM D3418
Coefficient of Thermal Expansion ppm/°C	180	ASTM E831

Product Physical Properties

	<u>Value</u>	<u>Method</u>
Dielectric Strength volts/mil	1350	ASTM D 149
Lap Shear Strength psi	710	ASTM D 1002
Shear Modulus psi	50	ASTM D 1002
Dielectric constant D_k @ 1 MHz	3.5	IPC TM 650 - 2.5.5.3
Dissipation factor D_f @ 1 MHz	0.005	IPC TM 650 - 2.5.5.3
Thermal Conductivity W/m-K	0.4	ASTM E 1530
Thermal Resistance °C-in ² /W	1.1	ASTM E 1530
Heat Capacity J/gK	1.04	E1461-01
CTE (X and Y) ppm/°C	40	ASTM E831
Total Product Weight g/m ²	376	Arlon SQA-TMS-025

PROCESSING RECOMMENDATIONS

Product Shelf Life

6 months from DOM at 45°F +/- 5°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.

Recommended Primers

No primer required.

Recommended Cure Cycle

15 min @ 250°F; 10-50 psi

Product Operating Temperature

-100 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.

Last Revised May 9, 2016.