

## PRODUCT INFORMATION SHEET

**Arlon Product Number**

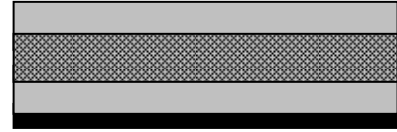
48A43X008

### PRODUCT DESCRIPTION

Thermabond<sup>®</sup>: Electrically insulating, thermally conductive, thermal interface material (TIM)

#### Design / Construction

**Side 1:** Cured silicone rubber  
**Substrate:** 1080-style fiberglass  
**Side 2:** Cured silicone rubber  
**Liner:** Polyethylene



#### Product Thickness

**Side 1 thickness:**

Value

0.0025 in.

Method

Arlon SQA-TMS-003

**Side 2 thickness:**

0.0025 in.

Arlon SQA-TMS-003

**Overall thickness:**

0.0080 in.

Arlon SQA-TMS-003

Product Color :

Gray

### PHYSICAL PROPERTIES

<u>Silicone Compound Properties</u>		<u>Value</u>	<u>Method</u>
<b>Tensile Strength</b>	psi	685	ASTM D 412
<b>Elongation</b>	%	125	ASTM D 412
<b>Poisson's Ratio</b>	---	~0.5	---
<b>Durometer</b>	Shore A	77	ASTM D 2240
<b>Plasticity</b>	mm	2.3	Arlon SQA-TMS-005
<b>Specific Gravity</b>	---	2.8	Arlon SQA-TMS-024
<b>Thermal Conductivity (@ 100C)</b>	W/m-K	1.4	ASTM E 1530
<b>Heat Capacity (@ 100C)</b>	J/gK	0.82	Arlon SQA-TMS-052
<b>Dielectric constant D<sub>k</sub> (@ 1MHz)</b>	---	6.91	IPC TM 650 - 2.5.5.3
<b>Dissipation factor D<sub>f</sub> (@ 1MHz)</b>	---	0.0044	IPC TM 650 - 2.5.5.3
<b>Elastic Modulus up to 1% strain</b>	psi	3550	Arlon SQA-TMS-008
<b>Glass Transition Temperature</b>	°C	-118	ASTM D3418
<b>CTE (20°C – 160°C)</b>	ppm/°C	105	ASTM E831
<u>Substrate Properties</u>		<u>Value</u>	<u>Method</u>
	<b>Thickness</b>	0.003	Arlon SQA-TMS-003
	<b>Color</b>	Naturally white	N/A
<u>Product Properties</u>		<u>Value</u>	<u>Method</u>
<b>Dielectric Strength</b>	volts/mil	640	ASTM D 149
<b>Thermal Resistance (@ 50C 3MPa)</b>	(m <sup>2</sup> *K)/W	1.2E-4	Arlon SQA-TMS-054
<b>Thermal Impedance</b>	°C-in <sup>2</sup> /W	0.26	ASTM D 5470
<b>Total Product Weight</b>	g/m <sup>2</sup>	432	Arlon SQA-TMS-025

### SHELF LIFE & PROCESSING RECOMMENDATIONS

**Product Shelf Life**

5 years from DOM at 24°C +/- 3°C

*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.*

**Product Operating Temperature**

-100 to 204°C

*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:*

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