

STARON®

The information contained herein is provided by LOTTE ADVANCED MATERIALS and its subsidiaries and affiliates (collectively referred to as "LOTTE ADVANCED MATERIALS") for information purposes only and should be used by individuals with technical experience and knowledge in the area. LOTTE ADVANCED MATERIALS does not make any representation or warranties of the usefulness or expected result of the information, and does not assume any responsibility whatsoever related to the use of the information. Exclusion of the implied warranties may not apply in certain jurisdictions.

PROPERTIES	TYPICAL RESULTS	TEST PROCEDURE
Tensile strength	6,000 psi	ASTM D 638
Tensile modulus	600,000 psi	ASTM D 638
Flexural strength	10,000 psi	ASTM D 790
Flexural modulus	1,000,000 psi	ASTM D 790
Elongation	0.50%	ASTM D 638
Hardness	92 Rockwell "M" Scale 65 Barcol Impressor	ASTM D 785 ASTM D 2583
Thermal expansion	2.0 x 10 ⁻⁵ in/in F°	ASTM D 696
Gloss (60 Gardner)	Between 5 - 20	NEMA LD-3
Color stability	No change-200hrs	NEMA LD-3
Stain resistance	Pass Rating 41	ANSI Z 124
Abrasion resistance	Pass	ANSI Z 124
Boiling water surface resistance	No effect	NEMA LD-3
High temperature resistance	No effect	NEMA LD-3
IZOD Impact resistance (notched)	0.28 ft.lbf/in	ASTM D 256
Ball drop 1/2" (12.3 mm) sheet	144" w/ 1/2 lb ball, No failure	NEMA LD-3
Fungi and Bacterial resistance	No growth	ASTM G 21, G22
Specific gravity		
Solid colors	1.72	ASTM D 792
Patterened colors	1.69	
Water absorption	0.04%, (1/2", 24hrs) 0.11%, (1/8", 24hrs)	ASTM D 570
Flammability	Class A / Class 1	UBC 8-1
Flame spread	10	ASTM E 84
Smoke density	10	ASTM E 84
Radiant heat resistance	No visual effect	NEMA LD-3
Toxicity	84.4g (Solid Color) 81.8g (Patterned Color)	Pittsburgh Test Protocol (LC50 Test)

This Technical Bulletin is intended to provide guidelines for optimal fabrication, installation, and performance of LOTTE ADVANCED MATERIALS products mentioned. Though the information contained herein is deemed reliable, none of the contents--including but not limited to the instructions, techniques, graphics, and recommendations--is to be understood as implying legal liability of fitness for a specific purpose, any other type of warranty, or being complete or absolute in its range and nature of information.

Depending on the user's particular application, all necessary measures must be taken to verify and test the adequacy for such needs or application. Any information or recommendation herein is strictly for purposes of reference and as such, LOTTE ADVANCED MATERIALS assumes no responsibility for its suitability or accuracy or the use of such information for products other than LOTTE ADVANCED MATERIALS Staron® solid surfaces & Radianz® quartz surfaces.

TEMPEST®

The information contained herein is provided by LOTTE ADVANCED MATERIALS and its subsidiaries and affiliates (collectively referred to as "LOTTE ADVANCED MATERIALS") for information purposes only and should be used by individuals with technical experience and knowledge in the area. LOTTE ADVANCED MATERIALS does not make any representation or warranties of the usefulness or expected result of the information, and does not assume any *responsibility* whatsoever related to the use of the information. Exclusion of the implied warranties may not apply in certain jurisdictions.

PROPERTIES	TYPICAL RESULTS	TEST PROCEDURE
Tensile strength	3,500 psi	ASTM D 638
Tensile modulus	786,000 psi	ASTM D 638
Flexural strength	6,500 psi	ASTM D 790
Flexural modulus	950,000 psi	ASTM D 790
Elongation	0.50%	ASTM D 638
Hardness	88 Rockwell "M" Scale 54 Barcol Impressor	ASTM D 785 ASTM D 2583
Thermal expansion	2.3 x 10 ⁻⁵ in/in F° 3.6 x 10 ⁻⁵ m/m °C	ASTM D 696
Gloss (60 Gardner)	Between 10 - 75	NEMA LD-3
Color stability	Pass	NEMA LD-3
Stain resistance	Pass	ANSI Z 124
Cleanability & Wear	Pass	ANSI Z 124
Boiling water surface resistance	No effect	NEMA LD-3
High temperature resistance	No effect	NEMA LD-3
IZOD Impact resistance (notched)	0.28 ft.lbf/in	ASTM D 256
Ball drop 1/2" (12.3 mm) sheet	1/2 lb ball No failure, 93+	NEMA LD-3
Fungi and Bacterial resistance	No growth	ASTM G 21, G22
Specific gravity	1.6	ASTM D 792
Water absorption	0.04%, (1/2", 24hrs)	ASTM D 570
Flammability	Class A / Class 1	ASTM E 84 / UBC 8-1
Food Equipment Materials	Approved	NSF/ANSI 51 (Food Zone)

This Technical Bulletin is intended to provide guidelines for optimal fabrication, installation, and performance of LOTTE ADVANCED MATERIALS products mentioned. Though the information contained herein is deemed reliable, none of the contents--including but not limited to the instructions, techniques, graphics, and recommendations--is to be understood as implying legal liability of fitness for a specific purpose, any other type of warranty, or being complete or absolute in its range and nature of information.

Depending on the user's particular application, all necessary measures must be taken to verify and test the adequacy for such needs or application. Any information or recommendation herein is strictly for purposes of reference and as such, LOTTE ADVANCED MATERIALS assumes no responsibility for its suitability or accuracy or the use of such information for products other than LOTTE ADVANCED MATERIALS Staron® solid surfaces & Radianz® quartz surfaces.