TECHNICAL BULLETIN

# Performance Properties - American Standard

staron Solid Surfaces

SN-101-2016

## STARON®

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| 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<br>65 Barcol Impressor | ASTM D 785<br>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”<br>(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<br>Solid colors<br>Patterened colors | <br>1.72<br>1.69 | ASTM D 792 |
| Water absorption | 0.04%, (1/2”, 24hrs)<br>0.11%, (1/8”, 24hrs) | ASTM D 570 |
| Flammability<br>Flame spread<br>Smoke density | Class A / Class 1<br>10<br>10 | UBC 8-1<br>ASTM E 84<br>ASTM E 84 |
| Radiant heat resistance | No visual effect | NEMA LD-3 |
| Toxicity | 84.4g (Solid Color)<br>81.8g (Patterned Color) | Pittsburgh Test Protocol<br>(LC50 Test) |

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*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.*


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## TEMPEST®

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| 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<br>54 Barcol Impressor | ASTM D 785<br>ASTM D 2583 |
| Thermal expansion | 2.3 x 10-5 in/in F˚<br>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”<br>(12.3 mm) sheet | 1/2 lb ball<br>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) |

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