



**Samsung Staron**

Staron® solid surface sheets

This product has been GREENGUARD Indoor Air Quality Certified® by the GREENGUARD Environmental Institute under the GREENGUARD for Children & Schools<sup>SM</sup> product certification program.

| Certification Details:      |                  |
|-----------------------------|------------------|
| Certification No:           | S10Ss9004311-1   |
| Certification Status:       | Certified        |
| Certification Period(s):    | 09/2007- 09/2009 |
| Certification Restrictions: | NONE             |

**GREENGUARD Product Emission Standard for Children & Schools**

GREENGUARD Indoor Air Quality Certified Products meet the following minimum emission requirements:

| Product Category: Surfacing Materials | Product Sub Category: Solid Surfacing |
|---------------------------------------|---------------------------------------|
| Individual VOCs <sup>1</sup>          | < 1/100 TLV and < ½ CA chronic REL    |
| Formaldehyde <sup>2</sup>             | < 0.0135 ppm/13.5 ppb                 |
| Total VOCs <sup>3</sup>               | < 0.22 mg/m <sup>3</sup>              |
| Total Aldehydes <sup>4</sup>          | < 0.043 ppm/43 ppb                    |
| Total Phthalates <sup>5</sup>         | < 0.01 mg/m <sup>3</sup>              |
| Total Particles (< 10µm) <sup>6</sup> | < 0.02 mg/m <sup>3</sup>              |

<sup>1</sup>Any VOC not listed must produce an air concentration level no greater than 1/100 the Threshold Limit Value (TLV) industrial work place standard (Reference: American Conference of Government Industrial Hygienists, 6500 Glenway, Building D-7, Cincinnati, Ohio 45211-4438) and no greater than 1/2 the CA Chronic Reference Exposure Level (CREL) [http://www.oehha.ca.gov/air/chronic\\_rels/AllChrels.html](http://www.oehha.ca.gov/air/chronic_rels/AllChrels.html) - (CRELs) Adopted by the State of California Office of Environmental Health Hazard Assessment (OEHHA), February 2005).

<sup>2</sup>Formaldehyde criteria established so that emission levels reach 0.014ppm (13.5 ppb) within 14 days of installation (meeting CA 1350 requirements).

<sup>3</sup>Defined to be the total response of measured VOCs falling within the C<sub>6</sub> – C<sub>16</sub> range, with responses calibrated to a toluene surrogate.

<sup>4</sup>Defined to be the total response of a specific target list of aldehydes (2-butenal; acetaldehyde; benzaldehyde; 2, 5-dimethylbenzaldehyde, 2-methylbenzaldehyde; 3-and/or 4-methylbenzaldehyde; butanal; 3-methylbutanal; formaldehyde; hexanal; pentanal; propanal), with each individually calibrated to a compound specific standard.

<sup>5</sup>Total phthalates include dibutyl (DBP), diethylhexyl (DEHD), diethyl (DEP), butylbenzyl (BBP), di-octyl (DOP), and dimethyl (DMP) phthalates.

<sup>6</sup>Particles applicable to fibrous, particle releasing products with exposed surface area.

Complies with California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers" 2004 (CA section 01350)

GREENGUARD Certification affirms that a product's emissions fall within the limits selected by GREENGUARD from reputable third-party risk based criteria, as identified above. GREENGUARD program testing is conducted consistent with a defined protocol and does not measure emissions under usage conditions other than those defined in the protocol and does not address potential environmental impact other than chemical emissions.

For further product details, visit the product listing at [www.greenguard.org](http://www.greenguard.org). If you have any questions, contact the GREENGUARD Environmental Institute at 1.800.427.9681.