

PERFECTION  
*Delivered.*

*Specifications*

HanStone® Quartz  
*by Hanwha Surfaces*



# COMPANY OVERVIEW

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HanStone® Quartz

## PERFECTION



*Delivered.*

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We all want beautiful things. And at Hanwha Surfaces, a division of Hanwha L&C, we want to make things beautiful. That means dealing with the concept and delivery of perfection. Since 1952, Hanwha has been innovating materials and designing surfacing solutions with the perfect blend of beauty, elegance and functionality. Today, Hanwha Surfaces delivers the industry's most comprehensive quartz and solid surfacing solutions – with unequalled consistency of color, texture and quality.

In a world where everything moves so fast, Hanwha Surfaces makes the time to sweat the small stuff, pay attention to the details and understand what it takes to deliver something magical, something perfect.

 Hanwha L&C | Surfaces

### HANWHA

Headquartered in Seoul, Korea, Hanwha is a leader in innovative technologies including telecommunications, Internet and chemicals. Established in 1952 under the name Korea Explosives Corporation, Hanwha employs approximately 26,000 people worldwide and has a sales revenue of \$40 billion. Hanwha has five business areas: manufacturing/construction, finance, distribution/leisure, SI/communication, and sports. HanStone Quartz is part of Hanwha Living and Creative Corporation within the manufacturing/construction business area.

Hanwha Living and Creative Corporation (Hanwha L&C Corp.) was established in 1966 and has since grown to become a brand that enhances the standard of living. Hanwha Surfaces, a division of Hanwha L&C, is located in Atlanta, Georgia with a distribution network throughout the US and Canada. Hanwha Surfaces includes Hanex® Solid Surfaces and HanStone Quartz and are available from a network of distributors throughout North America.

### HANEX SOLID SURFACES

Made from 100% acrylic solid surface, Hanex Solid Surfaces is an ideal material for residential and commercial applications with consistent, long-lasting beauty and unlimited design flexibility. Hanex Solid Surfaces is a non-porous material that is easy to clean and maintain. It is resistant to high temperature, UV, chemicals and staining, making it an attractive surface with endless applications.

Hanex Solid Surfaces can be fabricated and installed with smooth inconspicuous seam lines and can be integrated with solid surface sinks and bowls for a smooth continuous surface. With more than 78 choices, Hanex makes designing elegant as well as practical.

### HANSTONE QUARTZ

HanStone Quartz offers the natural beauty of quartz with up to six times the strength and durability of granite. More than 90% of HanStone Quartz is mined quartz crystals, one of nature's hardest materials. The quartz is combined with polyester resins and pigments to create the look of natural stone without the high maintenance. There's no need for sealing, conditioning and polishing. HanStone Quartz is scratch and stain resistant and its non-porous nature makes it an ideal surface for residential or commercial applications.

HanStone Quartz offers design flexibility to make any vision a reality. Available in more than 43 colors and patterns that are inspired by the most breathtaking hues and textures in nature, HanStone Quartz delivers one of the strongest and most durable surface materials on the market, without sacrificing style.

# PRODUCT INFORMATION

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HanStone® Quartz



### HANSTONE QUARTZ APPLICATIONS

An ideal surface for everyday wear and tear, HanStone Quartz is as practical as it is beautiful. From kitchens to bathrooms to commercial food preparation areas to healthcare facilities, HanStone Quartz offers architects and designers versatility in design with unmatched durability.

HanStone Quartz offers a Commercial 10-Year Limited Warranty. HanStone Quartz offers a Residential Lifetime Limited Warranty. Not only is HanStone Quartz an ideal surface, but also a long-lasting investment.

### WHERE TO FIND HANSTONE QUARTZ

HanStone Quartz is available from a network of distributors throughout North America, Europe and Asia. Homeowners and trade professionals in the United States and Canada can locate a distributor in their area by logging on to [hanwhasurfaces.com](http://hanwhasurfaces.com). For more information regarding the availability of HanStone Quartz, please e-mail [info@hanwhasurfaces.com](mailto:info@hanwhasurfaces.com) or call 1.888.426.9421.



### ESTABLISHED

Hanwha Group 1952  
Hanwha Living and Creative Corporation 1966  
HanStone Quartz 2004

### GLOBAL HEADQUARTERS

Hanwha Living and Creative Corporation  
Hanwha Building  
1 Changgyo-dong, Chung-gu  
Seoul, Korea  
Tel: 82.2.729.2051  
Fax: 82.2.729.1447

### NORTH AMERICAN OFFICE

Hanwha L&C | Surfaces  
2839 Paces Ferry Rd, Suite 200  
Atlanta, GA 30339  
Tel: 888.426.9421  
Tel: 770.431.6110

### DISTRIBUTION NETWORK

We have an extensive network of distributors across North America. To locate a distributor in your area, visit our website: [hanwhasurfaces.com](http://hanwhasurfaces.com).

### PRODUCT OVERVIEW

HanStone Quartz offers the natural beauty of quartz with up to six times the strength and durability of granite. More than 90% of HanStone Quartz is mined quartz crystals, one of nature's hardest materials ranking seven out of 10 on Mohs Scale of Hardness. The quartz crystals are combined with polyester resins and pigment to create the look of natural stone without the high maintenance. There's no need for sealing, conditioning or polishing. HanStone Quartz is scratch and stain resistant and its non-porous nature makes it an ideal surface for any application.

### CONTACT US

Toll free: 888.426.9421  
E-mail: [info@hanwhasurfaces.com](mailto:info@hanwhasurfaces.com)  
Website: [hanwhasurfaces.com](http://hanwhasurfaces.com)



## Frequently Asked Questions

### *What is HanStone Quartz?*

HanStone Quartz offers the natural beauty of quartz with up to six times the strength and durability of granite. More than 90% of HanStone Quartz is mined quartz crystals, one of nature's hardest materials. The quartz is combined with polyester resins and pigment to create the look of natural stone without the high maintenance.

### *What is natural quartz?*

Quartz is one of the hardest components of natural granite. Quartz rates seven out of 10 on Mohs Scale of Hardness. The only materials harder are diamonds, sapphires and topaz. The quartz crystals are used to create a beautiful and strong surface that is highly scratch and impact resistant.

### *What are the advantages of HanStone Quartz?*

A high-performing surface, HanStone Quartz is non-porous preventing unwelcome germs, bacteria and mildew. It does not require sealing, conditioning and polishing. HanStone Quartz is also scratch and stain resistant unlike alternative surface options such as granite, tile and marble.

### *What HanStone Quartz products are available?*

HanStone Quartz comes in sheets that vary in thickness, width and length. Each sheet is fabricated into a variety of design applications.

Thickness	Width	Length
3 CM (1 1/8")	55"	120"
2 CM (3/4")	55"	120"
1.5 CM (5/8")	55"	120"
1.2 CM (1/2")	51"	118"

*Check for latest available sizes*

### *How many color surfaces does HanStone Quartz have available?*

HanStone Quartz offers design flexibility to make any vision a reality. Available in more than 43 colors and patterns that emulate the hues and textures in natural stone, HanStone Quartz delivers one of the strongest and most durable surface materials on the market, without sacrificing style.

### *Where can HanStone Quartz be applied?*

Residential uses such as kitchen countertops, islands, peninsulas; bath vanity top, shower stalls and shower surrounds; table tops, fireplace surrounds, window sills, wainscoting, wall covering and threshold.

Commercial uses such as healthcare facilities, restaurants, offices; including conference tables, reception and desktops, countertops and credenzas, lobby/interior walls, food preparation areas, laboratories, and inlays.

HanStone Quartz makes a very remarkable flooring product in a home or office. In addition to the standard size tiles that are available, custom sizes can also be fabricated.



## Frequently Asked Questions

### *What is the difference between Quartz and Solid Surface?*

Quartz is a 100% natural hard mineral that provides strength and beauty. Solid surfaces are made of plastic polymers and aluminum that lack the brilliance and clarity of natural stone, and are more likely to scorch or scratch.

### *How do I care for HanStone Quartz?*

Simply clean up any spills with soap and water. For routine cleaning, use a small amount of cleaner that is non-bleach and non-abrasive along with warm water and a damp cloth. Repeat as needed to keep the lustrous gloss and radiant sheen.

Although HanStone Quartz is resistant to stains, any type of spill should be cleaned as soon as possible. Any liquid spills, fruits, vegetables, or other foods should be wiped up and cleaned with soap and water.

### *Is HanStone Quartz hygienic?*

HanStone Quartz is intrinsically a non-porous material preventing unwelcome germs, bacteria and mildew. It does not require sealing, conditioning and polishing.

### *Is HanStone Quartz scratch resistant?*

Because HanStone Quartz contains more than 90% quartz crystals, the hardest components of natural granite, the surface is highly scratch and impact resistant.

### *How is HanStone Quartz installed?*

HanStone Quartz is installed by trained and certified fabricators. Using a certified fabricator ensures that HanStone Quartz is installed properly and under full warranty.

### *Where can I find a local fabricator or request a color sample?*

Please visit [hanwhasurfaces.com](http://hanwhasurfaces.com) and locate a distributor nearest you. Distributors will direct you to a retailer or fabricator who stocks and installs HanStone Quartz in your area.

### *Do I need to finish or seal HanStone Quartz?*

No. Unlike natural stone products, HanStone Quartz is a non-porous surface you will NEVER have to seal.

### *Can you cut directly on the surface of HanStone Quartz?*

It is a matter of choice. While HanStone Quartz is made of more than 90% natural quartz crystals that are up to six times harder than granite, it is always recommended to use a cutting board to prevent any dulling of the surface that can occur over a long term of surface cutting.

### *When preparing meals, can raw foods such as vegetables, acidic fruits and meats be placed directly on the surface?*

Yes. HanStone Quartz is a non-porous surface. This means germs and bacteria can not accumulate with regular cleaning. HanStone Quartz is an approved surface for commercial food preparation areas in restaurants.



## Frequently Asked Questions

### *Can hot plates and pans be placed directly on HanStone Quartz?*

While HanStone Quartz can withstand heat, it is still advised to use hot pads or trivets when using cooking units such as electric frying pans, crock-pots, roaster ovens. To avoid damage, it is recommended to avoid placing hot pans directly on the surface.

### *How can I find out more and/or request product literature?*

Complete product descriptions, a gallery and technical specifications are all available on the website. Product brochures can be downloaded from the website or are available by calling HanStone Quartz toll free at 1.888.426.9421.

### *What are the advantages of HanStone Quartz vs. other surfaces available?*

	<i>HanStone Quartz</i>	<i>Solid Surface</i>	<i>Granite</i>	<i>Tile</i>	<i>Laminate</i>
Stain Resistant	✓	✓			
Scratch Resistant	✓	✓	✓	✓	
Mold & Mildew Resistant	✓	✓			
Chip & Crack Resistant	✓	✓			
Heat & Burn Resistant	✓		✓	✓	
Resistant to Chemicals, Acids and Solvents	✓		✓		



## Product Information

### PRODUCT NAME

HanStone® Quartz

### PRODUCT DESCRIPTION

Quartz surfacing material

### COMPOSITION AND MATERIALS

A blend of 93% natural quartz (crystalline silica), synthetic resin, colorant and additives.

### PRODUCT CHARACTERISTICS

- Impact Resistant
- Stain Resistant
- Low Maintenance
- Heat Resistant
- Scratch Resistant
- Bacteria Resistant  
(Hygienic and non-porous)
- NSF Compliant
- Smooth Surface

### APPLICATIONS

#### *Residential Uses*

- Kitchen
  - Countertops
  - Islands
  - Peninsulas
- Bath
  - Vanity Tops
  - Shower Stalls and Shower Surrounds
- Other
  - Table Tops
  - Fireplace Surrounds
  - Window Sills
  - Wainscoting
  - Wall Coverings
  - Thresholds

#### *Commercial Uses*

- Healthcare Facilities, Restaurants, Offices
  - Conference Tables
  - Reception and Desktops
  - Countertops and Credenzas
  - Lobby/Interior Walls
  - Food Preparation Areas
  - Laboratories
  - Flooring and Inlays

### PRODUCT COMPARISON—QUARTZ VS. GRANITE

There are many surfacing materials available in the marketplace. Materials such as granite, marble, and a variety of stone are used in their raw form. Natural quartz surfaces are created with a combination of natural and synthetic materials to create the look and beauty of natural stone.

#### *Granite*

A natural, durable and hard stone (or rock), granite is composed of feldspar, quartz and mica. The hardest mineral found in granite is quartz crystal. There are countless patterns, grains and colors found in granite, but the ability to match different quarried granite is next to impossible.

While granite is abundantly available, not all granite has the same quality, and prices vary greatly with no long-term warranty coverage.

Naturally porous, granite requires sealing with proper and routine maintenance to prevent staining and bacterial growth. Granite is heat and scratch resistant, but prone to nicks, chips and cracks making it next to impossible to repair. The slightest imperfection in the stone will result in cracking.

Granite can be produced in regions with low standards in environmental and employee protection and in some instances with great environmental and human cost.

#### *Quartz*

A pure mineral with crystalline structure, quartz comes in a variety of colors due to trace minerals. Quartz has a Mohs Hardness of 7 compared to granite between 5 and 6.

Quartz surface is made from approximately 93% quartz crystals, combined with polyester resins and pigment to create the look of natural stone surfaces.

The fact that quartz is made in ISO regulated factories assures a very strong homogenous product—patterns and colors are maintained throughout.

Due to the instability of granite, it is generally required to add steel rods near any cutout or weak point. Quartz surface is a more stable and durable material, which generally does not require reinforcement.

Since quartz is one of the hardest materials in nature, quartz surfaces are less likely to sustain chips, cracks and scratches.

Quartz surface is stain and scratch resistant and because it's non-porous, there's no need for sealing, conditioning and polishing.

HanStone Quartz offers a Commercial 10-Year Limited Warranty. For Residential, HanStone Quartz offers a Lifetime Limited Warranty.



## Product Information

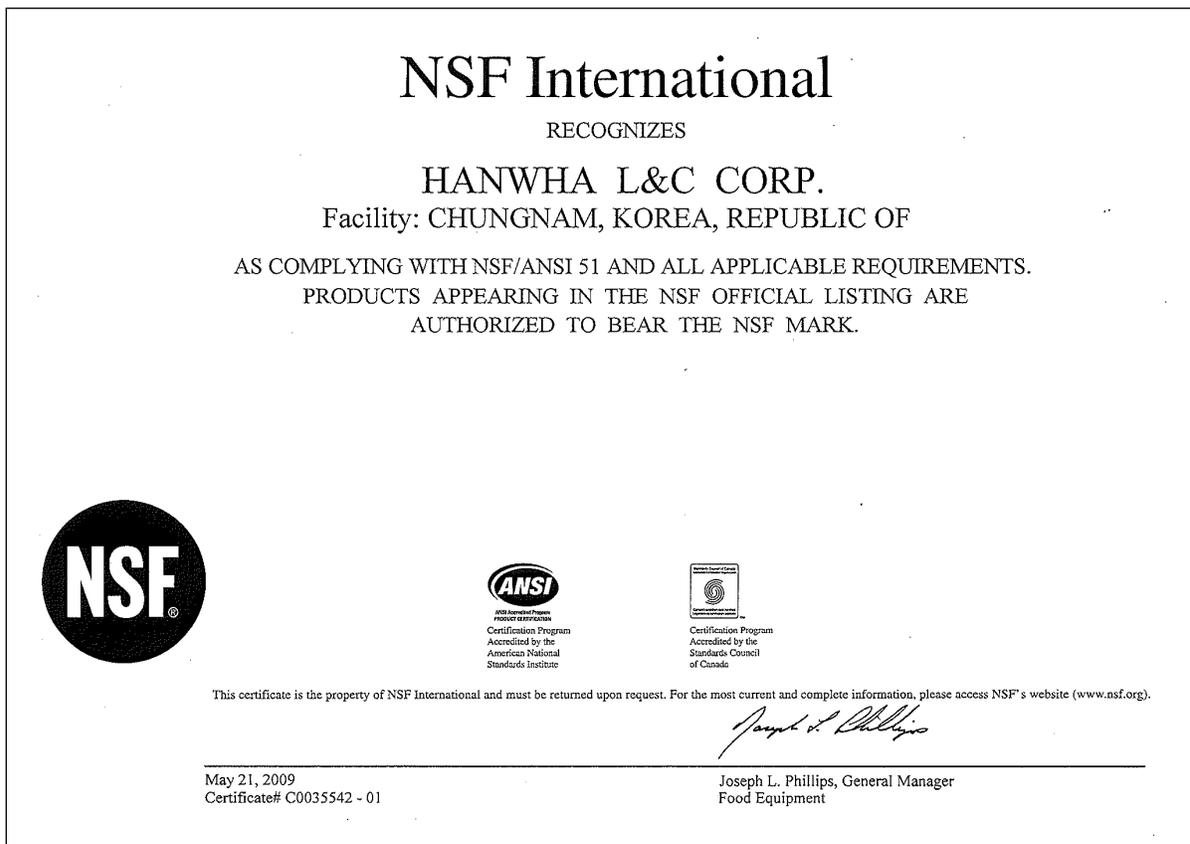
### CHART—QUARTZ VS. GRANITE

	<i>Granite</i>	<i>Quartz</i>
Requires sealing	✓	
Stain resistant		✓
Scratch resistant	✓	✓
Mold & mildew resistant		✓
Chip & crack resistant		✓
Heat & burn resistant	✓	✓
Thickness consistency		✓
Less material waste		✓
NSF 51		✓
Commercial 10-Year Limited Warranty		✓

### CERTIFICATIONS

- NSF 51 (National Sanitation Foundation) for Food Preparation and Handling Area
- ISO 9001 (Quality Management System)
- ISO 14001 (Environment Management System)
- UL (Universal Laboratory)

*Note: KFQ and NSF certifications valid only for product manufactured in Korea.*



National Sanitation Foundation (NSF 51 for Food Zone)

Certifications Continued...



Quality Management System (ISO14001)

Certifications Continued...



Quality Management System (ISO9001)

Certifications Continued...



THE INTERNATIONAL CERTIFICATION NETWORK

### CERTIFICATE

**IQNet and  
KFQ**  
hereby certify that the organization

**HANWHA L&C BUKANG PLANT**

- FIRST PLANT : 801, Bugang-ri, Buyong-myeon, Cheongwon-gun, Chungcheongbuk-do, Korea
- SECOND PLANT : 229, Geumho-ri, Buyong-myeon, Cheongwon-gun, Chungcheongbuk-do, Korea

for the following field of activities

- FIRST PLANT : PRODUCTION OF FLOORING, WINDOW-PROFILE, WINDOW SETS, DOOR SETS, SMC(SHEET MOLDING COMPOUND), PVC-RIGID FILM, PVC TILE AND TILE CARPET
- SECOND PLANT : PRODUCTION OF GMT(GLASS FIBER MAT REINFORCED THERMOPLASTIC), GMT MOLDING PRODUCTION, EPP(EXPANDED POLYPROPYLENE), BUMPER CORE, ARTIFICIAL ACRYLIC MARBLE, FCCL(FLEXIBLE COPPER CLAD LAMINATE), CL(COVERLAY) AND KHANSTONE(ENGINEERED STONE)

has implemented and maintain a

### Environmental Management System

which fulfills the requirements of the following standard

## ISO 14001:2004

Issued on : 2007. 10. 26  
Validity date : 2010. 7. 23

*Registration Number : KR - 02779*



*René Wasmer*  
President of IQNet



Jae Ryong Kim  
President & CEO of KFQ



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Quality Management System (ISO14001)

Certifications Continued...



THE INTERNATIONAL CERTIFICATION NETWORK

### CERTIFICATE

IQNet and  
KFO  
hereby certify that the organization

**HANWHA L&C CO., LTD**  
**HEAD OFFICE AND BUKANG PLANT**

- HEAD OFFICE : 1, Janggyo-dong, Jung-gu, Seoul, Korea
- FIRST PLANT : 801, Bugang-ri, Buyong-myeon, Cheongwon-gun, Chungcheongbuk-do, Korea
- SECOND PLANT : 229, Geumho-ri, Buyong-myeon, Cheongwon-gun, Chungcheongbuk-do, Korea

for the following field of activities

- FIRST PLANT : DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF FLOORING, WINDOW-PROFILE, WINDOW SETS, DOOR SETS, SMC(SHEET MOLDING COMPOUND), PVC-RIGID FILM, PVC TILE AND CARPET TILE
- SECOND PLANT : DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF GMT(GLASS FIBER MAT REINFORCED THERMOPLASTIC), GMT MOLDING PRODUCTION, EPP(EXPANDED POLYPROPYLENE), BUMPER CORE, ARTIFICIAL ACRYLIC MARBLE, FCCL(FLEXIBLE COPPER CLAD LAMINATE), CL(COVERLAY) AND KHANSTONE(ENGINEERED STONE)

has implemented and maintain a

**Quality Management System**  
which fulfills the requirements of the following standard

**ISO 9001:2008**

Issued on : 2009. 09. 28  
Validity date : 2010. 07. 29

*Registration Number:* KR - 00100



*René Wasmer*  
René Wasmer  
President of IQNet



*Joe Ryong Kim*  
Joe Ryong Kim  
President & CEO of KFO

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FONDONORMA Venezuela HKQAA Hong Kong China ICONTEC Colombia IMNC Mexico Inspecta Certification Finland  
IRAM Argentina JQA Japan KFO Korea MSZT Hungary Nemko AS Norway NSAI Ireland PCBC Poland  
Quality Austria Austria RR Russia SAI Global Australia SII Israel SIQ Slovenia SIRIM QAS International Malaysia  
SQS Switzerland SRAC Romania TEST St Petersburg Russia YUQS Serbia  
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Quality Management System (ISO9001)

Certifications Continued...



### Certificate of Compliance

**Hanstone**  
**Hanwha L&C USA LLC**

This product has been certified according to the GREENGUARD Indoor Air Quality (IAQ) Certification Program for Low Emitting Products

**Reference Standard:** GGPS.001 GREENGUARD IAQ Standard for Building Materials, Finishes, and Furnishings

**Product Type:** Furniture Components/Materials, Seating, and Free Standing Furniture and Furnishing Units

**Certification Details:**

**Certificate No:** S10Sm9004811-3

**Status:** Certified

**Period:** 10/2007 - 10/2010

**Restrictions:** NONE

Criteria	Allowable Limits
TVOC <sup>1</sup>	< 0.25 mg/m <sup>3</sup>
Formaldehyde	< 0.025 ppm
Total Aldehydes <sup>2</sup>	< 0.05 ppm
Individual VOCs <sup>3</sup>	< 0.1 TLV
4-phenylcyclohexene	< 0.0033 mg/m <sup>3</sup>

Listing of measured carcinogens and reproductive toxins as identified by California Proposition 65, the U.S. National Toxicology Program (NTP), and the International Agency on Research on Cancer (IARC) must be provided.

Any pollutant regulated as a primary or secondary outdoor air pollutant must meet a concentration that will not generate an air concentration greater than that promulgated by the National Ambient Air Quality Standard (U.S. EPA, code of Federal Regulations, Title 40, Part 50).

See referenced standard for a complete technical explanation.

<sup>1</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>2</sup>Defined to be the total response of a target list of aldehydes (2-butanal; 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>3</sup>Any pollutant not listed must produce an air concentration level no greater than 1/10 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).

GREENGUARD Certification affirms that products meet the criteria of the referenced standard and the requirements of the specific certification program. Certification testing is conducted according to a consistent, defined protocol. The testing does not evaluate emissions under usage conditions other than those defined in the protocol and does not address potential environmental impact other than chemical and particle emissions.

The GREENGUARD Environmental Institute (GEI) is an industry independent, third party certification organization that qualifies products for low chemical emissions. GREENGUARD Certification programs use defined product standards, test methodologies, product sample collection and handling procedures, program application processes and on-going verification procedures. GREENGUARD standards, methods, and procedures are available at [www.GREENGUARD.org](http://www.GREENGUARD.org).

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GGPC.001D

Certifications Continued...



**Hanstone**  
**Hanwha L&C USA LLC**

This product has been certified according to the GREENGUARD Children & Schools Certification Program for Low Emitting Products

**Reference Standard:** GGPS.002 GREENGUARD Children & Schools<sup>sm</sup> Standard

**Product Type:** All Products

### Certificate of Compliance

**Certification Details:**

**Certificate No:** S10Sm9004811-3

**Status:** Certified

**Period:** 10/2007 - 10/2010

**Restrictions:** NONE

Criteria	Allowable Limits
Individual VOCs <sup>1</sup>	< 1/100 TLV and < ½ CA chronic REL
Formaldehyde	< 0.0135 ppm /13.5 ppb
TVOC <sup>2</sup>	< 0.22 mg/m <sup>3</sup>
Total Aldehydes <sup>3</sup>	< 0.043 ppm /43 ppb
Total Phthalates <sup>4</sup>	< 0.01 mg/m <sup>3</sup>
Total Particles <sup>5</sup>	< 0.02 mg/m <sup>3</sup>

See referenced standard for a complete technical explanation.  
Complies with California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers" (CA section 01350)

<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 criterion (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), December 2008).

<sup>2</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>3</sup>Defined to be the total response of a 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>4</sup>Total phthalates include dibutyl (DBP), diethylhexyl (DEHD), diethyl (DEP), butylbenzyl (BBP), di -octyl (DOP), and dimethyl (DMP) phthalates.

<sup>5</sup>Particles are only applicable to fibrous, particle-releasing products with exposed surface area in air streams.

GREENGUARD Certification affirms that products meet the criteria of the referenced standard and the requirements of the specific certification program. Certification testing is conducted according to a consistent, defined protocol. The testing does not evaluate emissions under usage conditions other than those defined in the protocol and does not address potential environmental impact other than chemical and particle emissions.

The GREENGUARD Environmental Institute (GEI) is an industry independent, thirdparty certification organization that qualifies products for low chemical emissions. GREENGUARD Certification programs use defined product standards, test methodologies, product sample collection and handling procedures, program application processes and on-going verification procedures. GREENGUARD standards, methods, and procedures are available at [www.GREENGUARD.org](http://www.GREENGUARD.org).

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GGPC.002

# SPECIFICATIONS

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HanStone® Quartz



### TECHNICAL DATA SHEET

1	Abrasion Resistance (Weight Loss)	ASTM D 4060	1094 mg
2	Izod Impact Strength	ASTM D 256 (Method A)	13.3 J/m
3	Boiling Water Resistance	NEMA LD3 2000 3.5	No Effect
4	Colorfastness	ANZI Z124.6.5.1	Pass
5	Compression Strength (Dry)	ASTM C 170	209 MPa
	Compression Strength (Wet)	ASTM C 170	203 MPa
6	Density	KSF 2530	2.465 g/cm <sup>3</sup>
7	Deflection Temperature Under Load (1.82 MPa)	ASTM D 648	243°C
8	Flammability: Flame Spread	ASTM E-84, NFPA	Class A
	Smoke Developed	255	Class A
9	Flexural Modulus	ASTM D 790	39.7 GPa
	Flexural Strength	ASTM D 790	42.4 MPa
10	Freeze & Thaw Cycling	ASTM C 1026	Unaffected
11	Fungal & Bacterial Resistance	ASTM G 21	No Growth
12	Barcol Hardness	ASTM D 2583	86
13	Rockwell Hardness (HRM)	ASTM D 785 (Procedure A)	115
14	Point Impact	ANSI Z124.6.4.2.1	Pass
15	Slip Resistance: Static Coefficient of Friction (Dry)	ASTM C1028	0.67
	Static Coefficient of Friction (Wet)	ASTM C1028	0.49
16	Stain Resistance	ANSI Z124.6.5.2	Pass
17	Tensile Strength	ASTM D 638	17.8 MPa
18	Thermal Expansion	ASTM D-696	1.52 x 10 <sup>-5</sup> in/in/°C
19	Water Absorption: Long-term & Short-term	ASTM D 570 (24hr. Immersion)	< 0.011%
20	Wear and Cleanability	ANSI Z124.6.5.3	Pass

# TECHNICAL INFORMATION

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HanStone® Quartz





## Material Safety Data Sheet

### PRODUCT NAME

HanStone® Quartz (HanStone is a registered trademark of Hanwha L&C Corporation.)

### MANUFACTURER/SUPPLIER

Hanwha Living and Creative Corporation  
 Hanwha Building  
 1 Changgyo-dong, Chung-gu  
 Seoul, Korea  
 Tel: 82.2.729.2051  
 Fax: 82.2.729.1447

### CONTACT FOR PRODUCT INFORMATION OR EMERGENCY

Hanwha Surfaces  
 2839 Paces Ferry Rd, Suite 200  
 Atlanta, GA 30339  
 Tel: 888.426.9421  
 Tel: 770.431.6110

### COMPOSITION/INFORMATION ON INGREDIENTS

Component	% by Weight	CAS #
Synthetic resin	< 10	-
Quartz (Crystalline silica)	> 40 ~ 90	14808-60-7
Colorant	< 1 Trade secret	
Additives	< 1 Trade secret	

### HAZARDS IDENTIFICATION

#### Potential Health Effects

- This product is not hazardous as shipped.
- However, sawing, routing, drilling, and/or sanding can generate harmful dust.
- Dust generated during handling of this product can irritate eyes, nose and respiratory passages and cause sneezing and coughing.
- Dust generated during handling of quartz surfaces products can contain particles of crystalline silica.
- Overexposure to airborne crystalline silica can cause silicosis, symptoms of which include difficulty in breathing, wheezing, coughing, and impairment of lung function.

### FIRST AID MEASURES

- Inhalation: Move to well-ventilated area. Give artificial respiration if not breathing. Give oxygen if breathing is impaired. Call a physician.
- Eye Contact: Rinse immediately with plenty of water. Call a physician.
- Skin Contact: Not applicable
- Ingestion: Not applicable

### FIRE HAZARD DATA

- Extinguishing Media: Water, Dry Chemical, CO<sub>2</sub>, Foam



## Material Safety Data Sheet

- Fire-Fighting Instructions: Keep personnel removed and upwind of fire. Wear a self-contained breathing apparatus.

### ACCIDENTAL RELEASE MEASURES

- Safeguard (Personnel): Note: Review Fire-Fighting Instructions and Handling (Personnel) sections before proceeding with clean up. Use appropriate Personal Protectives during clean up.
- Spill Clean-up: Not applicable

### STORAGE AND HANDLING

- Handling (Personnel): Avoid breathing dust generated during sawing, sanding, routing, or drilling. Avoid breathing fumes generated during sawing, sanding, routing, or drilling.
- Storage: Store in a cool place. Avoid extreme weather/temperature conditions. Avoid exposure to direct sunlight. Never store material flat. Store materials on storage system to provide full support of the entire length and width of the material that is perfectly leveled.

### EXPOSURE CONTROLS AND PERSONAL PROTECTION

- Use ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits.

- National occupation exposure limits: 0.3mg/m<sup>3</sup> OSHA TWA (total dust) – Quartz 0.1mg/m<sup>3</sup> OSHA TWA (airborne particles of respirable size) – Quartz

- Personal Protection: Protective equipment: Eye/Face/Hand Protection. Wear safety protector during operations such as sawing, sanding, drilling, or routing.

### PHYSICAL AND CHEMICAL DATA

- Safety Data
  - Decomposition temperature: None
  - Water solubility: Insoluble
- Appearance as delivered
  - Form: Solid, sheets and shaped articles
  - Color: Various
  - Odor: None (Negligible odor)
- Flash point: Not applicable
- Autoignition temperature: Not applicable

### STABILITY AND REACTIVITY

- Stability: Stable
- Conditions to avoid: Stable at normal condition
- Incompatibility (materials to avoid): None reasonably foreseeable
- Hazardous decomposition product: In the event of fire, carbon monoxide hydrocarbons smoke may be produced. Fumes of metal oxides and mica particles could also be released.

### TOXICOLOGICAL INFORMATION

- Operations such as sawing, routing, drilling and sanding can generate dust.
- High concentrations of dust can irritate eyes, nose and respiratory system and cause coughing and sneezing.
- Dust generated during handling of quartz surfacing products can contain particles of quartz (crystalline silica).
- Overexposure to airborne quartz can cause silicosis.
- Symptoms of silicosis include coughing, difficulty in breathing, wheezing and progressive impairment of lung function.
- Epidemiology studies show limited evidence of lung cancer in occupations involving exposure to crystalline silica (quartz), such as stonecutters and granite industry workers.

### ECOLOGICAL INFORMATION

- Biodegradation: No information available
- Bioaccumulation: No information available
- Aquatic Toxicity: No information available (The product is insoluble and sinks in water)
- When properly handled and used in accordance with guidelines, our experience suggests that there is no negative effects to be expected on the environment.

### DISPOSAL CONSIDERATIONS

- Waste should be disposed of in a place certified to accept such materials in accordance with federal, state, and local regulations.
- Contaminated packaging: Not applicable

### TRANSPORT INFORMATION

Product is not classified for any mode of transportation.

### REGULATORY INFORMATION

This product does not require labeling: Quartz U.S.A.

CERCLA103 (40CFR302.4): none

SARA302 (40CFR355.30): none

SARA304 (40CFR355.40): none

SARA313 (40CFR372.65): none

OSHA313 (29CFR1910.119): none

SARA311/312 (40CFR370.21): acute: no, chronic:

yes, fire: no, reactivity: no

### OTHER INFORMATION

- The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.
- Responsibility for MSDS: “HanStone Quartz” products
- This information is based on technical information deemed reliable and is subject to revision as additional information is made available.

# CARE & MAINTENANCE

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HanStone® Quartz



### INTRODUCTION

The natural beauty of HanStone Quartz is easy to maintain. Made from the finest natural quartz, HanStone Quartz is the premier surfacing material with all the beauty of nature without its drawbacks. HanStone Quartz is a non-porous material that is highly stain, scratch, and heat resistant; however, it is not stain, scratch, or heat proof. Therefore, using common sense and the right care and maintenance can keep your HanStone Quartz beautiful for years to come.

#### *Routine Care and Maintenance*

Simply clean HanStone Quartz with soap and water on a regular basis to keep the lustrous gloss and radiant sheen. For routine cleaning, use warm water and a damp cloth with small amount of non-abrasive cleaner that does not contain bleach.

Although HanStone Quartz is resistant to stain, spills should be cleaned as soon as possible. Liquid spill, fruits, vegetables, or other foods should be wiped up and cleaned with soap and water.

#### *Preventing Damages*

##### **- Heat -**

HanStone Quartz is designed to be resistant to heat and can withstand exposure to normal cooking environment for brief periods of time without being damaged. Although HanStone Quartz is more resistant to heat compared to most surfacing materials in the market, all surfacing materials, including stone, can be damaged by extreme temperature changes, whether prolonged or sudden. Trivets and hot pads should be used when placing hot skillets, pans, or other heat generating appliances on the surface.

##### **- Scratches -**

HanStone Quartz's durable surface is designed to withstand normal use. While it is resistant to scratches, cuts and chipping, cutting directly on HanStone Quartz should be avoided. Using cutting boards and taking care not to drop or move heavy objects on the surface will help to ensure the long-lasting beauty of HanStone Quartz.

##### **- Chemical -**

There are some chemicals that may damage HanStone Quartz. Avoid exposing HanStone Quartz to any strong chemicals and solvents. It is important to note some of these chemicals and solvents can be found in household items like paint removers, paint and stain strippers that contain trichlorethane or methylene chloride, nail polish removers, bleach, furniture cleaners, oil soaps, permanent markers or inks and chemicals with high alkaline/PH levels (oven cleaners, drain openers, etc.). Avoid using cleaning products that contain oils, powders or abrasives.

Though long-term or frequent exposure must be avoided at all times, products that contain acetone or bleach may be used with short-term exposure (removing and rinsing within 5 minutes of application) to clean difficult stains or residues. Always handle such cleaning agents with care and rinse the applied surface with water completely afterwards.

### *Chemicals to Avoid*

The below list of chemicals should be avoided with HanStone Quartz; however, the below list is not a complete list, and there may be other chemicals not listed here that may damage HanStone Quartz. The effect of any chemical usage on HanStone Quartz is ultimately dependent on the type of chemical, the length of exposure, and the degree of concentration.

- Oil soaps, bluing agents, dyes, stains, paint thinner or strippers
- Solvents such as acetone, nail polish, lacquer thinner, or bleach (short-term exposure is acceptable for purpose of cleaning difficult stains—based on removing and rinsing applied area within 5 minutes)
- Chlorinated solvents such as trichloroethylene or methylene chloride
- Benzene, toluene, methyl ethyl ketone
- Concentrated acids such as hydrocyanic acid, hydrofluoric acid, hydrochloric acid, sulfuric acid, nitric acid
- Chemicals with high alkaline/PH levels (pH > 10)

If any of the substances listed comes into contact with HanStone Quartz, rinse with plenty of water and follow routine cleaning procedures immediately.

### *Removing Difficult Spills*

For stubborn or dried spills, if routine cleaning procedures do not work, use non-abrasive cleaning pad along with common household cleaners like Formula 409® Glass and Surface Cleaner\* or a comparable cleaning product. If gum, nail polish, paint, or other substances are accidentally allowed to adhere to the surface, they can be removed with the use of plastic scraper or putty knife to gently scrap off the substance and by following routine cleaning procedures.

### *General Precautions*

HanStone Quartz is made from the finest natural quartz, making it one of nature's hardest surfaces. As a result, HanStone Quartz will keep its beauty for years without sealing or polishing. It is also non-porous, so it won't absorb stains or harbor harmful bacteria. However, as general precaution, maintain your HanStone Quartz by using trivets and cutting boards to avoid damages caused by extreme or sudden change in temperature or impact on surface.

\*Formula 409® Glass & Surface Cleaner is a registered trademark of the Clorox Company.