

SAFETY DATA SHEET

Section 1: Identification

Product Name:	HanStone® Quartz
SDS Revision Date:	July 2019
Product Identifier:	Engineered solid stone surfaces, Quartz surfaces
Product Use:	Engineered stone surfaces for use as countertops, vanities, and other surfaces throughout residential and commercial interiors
Company:	Hyundai L&C Canada 2860 Innovation Drive London ON N6M 0C5 Canada
Emergency Phone Number:	1-519-617-7101

Section 2: Hazard(s) Identification

For Shipping Finished Product

GHS Classification:

Not applicable. Material is classified as non-hazardous

HanStone in its solid form poses no health hazard. If dust is created during fabrication or demolition respirable crystalline silica dust if allowed to become airborne increasing the risk of inhalation can occur; the following applies:

GHS Classification:

H350 H372 Carcinogenicity – Category 1A
H335 Category 3 (Respiratory tract irritation)

Signal Word: DANGER!



Hazard Statement:

H350 May cause CANCER
H372 Causes damage to organs through prolonged or repeated exposure
H335 May cause respiratory irritation

Precautionary Statements

Prevention:

P201 Obtain special instructions use
P202 Do not handle until all safety precautions have been read and understood
P260 Do not breathe dust
P264 Wash face and hands thoroughly after handling
P270 Do not eat, drink or smoke when using this product
P280 Wear protective gloves/protective clothing/eye protection
P284 Wear respirator protection P3 for particulates
Use personal protective equipment as required (respirator, cut resistant gloves, protective clothing)

Response:

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P308 IF exposed or concerned:
P313 Get medical advice/attention if you feel unwell

Disposal:

P501 Dispose of waste material as per local regulations.

Section 3: Composition/Information on Ingredients

Components	CAS Number	Proportion %
Crystalline Silica/Quartz	14808-60-7	≤87
Cristobalite	1446-46-1	<50
Glass & Mirror	NA	<21
Polyester Resin	Mixture	7-13
Other Material	NA	<4
Titanium Dioxide	13463-67-7	<1.5
Inorganic Pigment Mixture	NA	<1

Percentages vary based on slab design.

Section 4: First-Aid Measures

Inhalation:

Remove to fresh air and keep at rest in a position comfortable for breathing. If difficulty in breathing persists get medical attention. If breathing is difficult, provide oxygen.

Skin Contact:

Wash with plenty of soap and water. If skin irritation occurs get medical advice/attention. Broken edges of finished product may be sharp causing laceration to skin, if needed seek medical attention.

Eye Contact:

Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and able. Seek medical attention if material is embedded in eye. If eye irritation persists get medical advice and attention.

Ingestion:

Not applicable under normal handling conditions. If large amounts of dusts are ingested rinse mouth. Do not induce vomiting. Seek medical attention.

Most important symptoms and effects (acute or delayed/chronic)

Acute:

Respiratory tract: sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing.

Skin: Dust can cause mechanical abrasion, redness, rash like appearance, discomfort. Sharp edges can cut skin

Eyes: redness, discomfort, pain.

Ingestion: Abdominal pain.

Delayed/Chronic:

Repeat or prolonged exposure may cause cancer/silicosis. Symptoms include: coughing, difficulty breathing, wheezing and progressive lung function impairment.

Indication of any immediate medical attention and special treatment needed

No additional information is available

Section 5: Fire-Fighting Measures

Extinguishing Media

Suitable extinguishing media: Water, Dry Chemical, Co2, Foam

Unsuitable extinguishing media: None known

Special hazards arising from the substance or mixture

Fire hazard: Not flammable. Can be combustible with difficulty. When heated to decomposition, may release various hydrocarbons, carbon dioxide, carbon monoxide and water. Metal oxides and mineral fumes could also be released.

Explosion hazard: Not applicable

Reactivity: Hazardous reactions will not occur under normal conditions

Advice for firefighters

Precautionary measures fire: Fight fire with normal precautions from a reasonable distance

Firefighting instructions: Ensure personnel are keep a distance and upwind of fire.

Protection during firefighting: Use self-contained breathing apparatus and individual fire protective equipment.

Section 6: Accidental Release Measures

Use of personal precautions

Wear appropriate respirator protection and safety glasses where a risk of exposure to dust is present. Wear cut resistant gloves where sharp edges are present.

Environmental Precautions

If large quantities enter waterways, contact, Federal, State/Provincial, Local Environmental Regulators.

Methods for containment/cleaning up

Avoid generating dust. Recover material for reuse and reclamation when possible. Use of HEPA vacuum systems or shoveled/swept after light wetting down to avoid generating airborne particles. **DO NOT DRY SWEEP.**

Section 7: Handling and Storage

Precautions for Safe Handling

Avoid breathing dust. When fabricating and installing product, wet production methods should be used to minimize dust. Use adequate ventilation to minimize dust. Use vacuum cleaning equipment and wet methods to minimize generation of dust. Wash hands thoroughly with soap and water after handling prior to eating, drinking or smoking.

Precautions for Safe Storage

Secure properly when placing slabs on rack or A-frame. Ensure rack or A-frame is rated to handle the weight of the load. Product is heavy and breakable, secure slabs with care when storing or transporting to prevent injury and damage. Do not store slabs outside or expose to excess sun and rain.

Section 8: Exposure Controls/Personal Protection

Exposure limits

Component (Respirable)	ACGIH American Conference of Governmental	NIOSH National Institute for Occupational Safety and Health	OSHA-PELS OSHA PEL

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	Industrial Hygienists - ACGIH TLV (2016)	NIOSH REL	
Silica, Crystalline: Quartz	0.025 mg/m ³ TWA	0.05 mg/m ³ TWA	0.05 mg/m ³ TWA
Silica, Crystalline Cristobalite	0.025 mg/m ³ TWA	0.05 mg/m ³ TWA	0.05 mg/m ³ TWA
Abbreviations			
TWA = Time Weighted Average. TLV: Threshold Limit Values 8 hr time weighted average. PEL: Permissible Exposure Limit 8 hr time weighted average.			
These limits may change from time to time, follow all local safety laws.			

Consult with trained occupational health and safety professionals to monitor and conduct air sampling in the workplace to determine worker exposure levels and implement prevention and control methods.

Engineering Controls

Ventilation must be adequate to maintain the ambient workplace atmosphere to that below the exposure limits listed above.

Use at the source dust extraction equipment.

Use machinery and tools that use the wet method to minimize airborne dust.

Use vacuum cleaning equipment, or wetting material before a gentle sweeping to minimize generation of dust.

Do not use compressed air to remove dust.

Eyewash facilities should be readily available.

Personal Protective Equipment:

Eye / Face Protection:

Use safety glasses with side shields or safety goggles.

When cutting, drilling, grinding or polishing wear face and neck protection.

Skin / Body Protection:

Cover skin to minimize risk of mechanical irritation.

Wear gloves when handling dry dust.

Wear cut resistant gloves when exposed to sharp edges.

Wear steel toed safety footwear.

Respiratory Protection:

Use NIOSH approved filtering face piece respirator for protection against dusts or higher level of respiratory protection as indicated where there is potential to exceed the exposure limits. Follow the requirements based on your jurisdiction: The Canadian Safety Association CSA Standard Selection, Use and Care of Respirators Z94.4-11 or the OSHA's Respiratory Protection Standard, 29CFR1910.134 and to the NIOSH Respirator Selection Logic 2004 DHHS (NIOSH) for appropriate selection of respirators. Employees must be trained and qualified to use a respirator.

Section 9: Physical and Chemical Properties

Appearance:	Multi-coloured engineered quartz solid stone
Odour:	Odourless
pH:	NA
Melting Point/Freezing Point:	NA
Boiling Point:	NA

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Flash Point:	490°C
Flammability:	NA
Evaporation Rate:	NA
Density:	2.35 – 2.40 g/cm ³
Solubility in Water:	Insoluble in water
Moisture Absorption:	0.03%
Upper/Lower Flammability Limit:	None
Viscosity:	None, solid

Section 10: Stability and Reactivity

Reactivity:

This product is stable under most conditions.

Chemical Stability:

Avoid contact with hydrofluoric acids

Physical Stability:

Strong impact may cause material to break.

Hazardous Decomposition:

Thermal decomposition can release various polymer, pigments, hydrocarbons, carbon dioxide, carbon monoxide and water. Fumes of metal oxides and mica particles may also be released.

Hazardous Polymerization:

None

Section 11: Toxicological Information

No toxicological data is available for this product in solid form. No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet. The following information is based on respirable crystalline silica/quartz dust released during operations involved in the fabrication process, such as: grinding, drilling, cutting and polishing operations. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Warning for inhalation exposure only:

Crystalline silica (respirable size) has been classified by the IARC as Group 1 Carcinogen to humans.

Crystalline Silica / Quartz:

Inhalation (Human) LC Lo: 0.3mg/m³/10 Y
Inhalation (Human) TC Lo: 16mppcf/8H/17.9 Y
Intermittent: focal fibrosis, pneumoconiosis, cough, dyspnoea
Inhalation (rat) TC Lo: 5.0 mg/m³/6 H/71W
Intermittent – Liver Tumours
Oral LD₅₀ Rat: 500 mg/kg

Section 12: Ecological Information (non-mandatory)

Environmental Fate: No information available
Environmental Toxicity: No information available

Section 13: Disposal Considerations (non-mandatory)

This section provides guidance on proper disposal practices, recycling or reclamation of the chemical(s) or its container, and safe handling practices. To minimize exposure, this section should also refer the reader to Section 8 (Exposure Controls/Personal Protection) of the SDS. The information may include:

- Description of appropriate disposal containers to use.
- Recommendations of appropriate disposal methods to employ.
- Description of the physical and chemical properties that may affect disposal activities.
- Language discouraging sewage disposal.
- Any special precautions for landfills or incineration activities

Section 14: Transport Information

- UN number: None
- UN proper shipping name: Not regulated
- Transport hazard classes(es): None
- Packing group, if applicable: None
- Environmental hazards: None
- Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not determined
- Special precautions: None known

Section 15: Regulatory Information

UNITED STATES (FEDERAL AND STATE)

- TSCA Status: Crystalline silica (quartz) appears on the EPA TSCA inventory under the CAS No. 14808-60-7.
- RCRA: This product is not classified as a hazardous waste under the Resource Conservation and Recovery Act, or its regulations, 40 CFR §261 et seq.
- CERCLA: Crystalline silica (quartz) is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR §302.
- Emergency Planning and Community Right to Know Act (SARA Title III): This product contains the following chemicals subject to SARA 302 or SARA 313 reporting: None above the de minimus concentrations.
- Clean Air Act: Crystalline silica (quartz) is not processed with or does not contain any Class I or Class II ozone depleting substances.
- FDA: Silica is included in the list of substances that may be included in coatings used in food contact surfaces, 21 CFR §175.300(b)(3)(xxvi).
- California Proposition 65: Crystalline silica (airborne particles of respirable size) is classified as a substance known to the State of California to be a carcinogen.
- California Inhalation Reference Exposure Level (REL): California established a chronic non-cancer effect REL of 3 µg for silica (crystalline, respirable). A chronic REL is an airborne level of a substance at or below which no non-cancer health effects are anticipated in individuals indefinitely exposed to the substance at that level.

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- Massachusetts Toxic Use Reduction Act: Silica, crystalline (respirable size, <10 microns) is "toxic" for purposes of the Massachusetts Toxic Use Reduction Act.
 - Pennsylvania Worker and Community Right to Know Act: Quartz is a hazardous substance under the Act, but it is not a special hazardous substance or an environmental hazardous substance.
 - Texas Commission on Environmental Quality: The Texas CEQ has established chronic and acute Reference Values and short term and long term Effects Screening Levels for crystalline silica (quartz). The information can be accessed through www.tceq.texas.gov.
- CANADA**
- Domestic Substances List: as naturally occurring substances, are on the Canadian DSL.

Section 16: Other Information

Safety Data Sheet Revision Date: July 2019

Hazardous Material Information System (HMIS):

Health 1

Flammability 0

Physical Hazard 0

Web Sites with Information about Effects of Crystalline Silica Exposure

The Occupational Safety and Health Administration (OSHA) web site:

www.osha.gov/dsg/topics/silicacrystalline/

The U.S. National Institute for Occupational Safety and Health (NIOSH: www.cdc.gov/niosh/topics/silica)