

MATERIAL SAFETY DATA SHEET

Product Name: **VICOSTONE[®] Quartz Surfaces**

Also known as Chroma Quartz by European in North America

MSDS Date: March 04, 2010

1. Product and Company Description

Vicostone[®] is a registered trademark of Vinaconex Advanced Compound Stone Joint Stock Company

Company Identification:

Manufacturer: Vinaconex Advanced Compound Stone Joint Stock Company.

Address: Hoa Lac Hi-Tech Park, Thach That District, Hanoi, Viet Nam

Phone numbers (84 4) 33685824/ 33685827

Fax : (84 4) 33686652

2. Hazards Identification

Emergency Overview:

Appearance/Odor: Multi-colored engineered stone with no odor.

Potential Health Effects:

Acute Eye: Product in finished form does not present a health hazard via this route of entry. Dusts and flying particles generated during cutting, grinding and forming may cause irritation and injury.

Acute Skin: Dusts generated from this product may cause skin irritation.

Acute Inhalation: Dusts from product may cause irritation to respiratory tract, nose, throat and lungs.

Acute ingestion: Not considered a potential health hazard via this route of entry. This product may cause gastrointestinal irritation if dusts are swallowed.

Chronic Exposure: The adverse health effects from crystalline silica exposure - silicosis, cancer, scleroderma, tuberculosis, and nephrotoxicity - are chronic effects.

Aggravation of Pre-existing Conditions: Not Determined.

3. Hazardous Chemical Composition

Component	CAS#	% Composition
Crystalline silica (quartz) and other natural stone	14808-60-7	Around 90
Resins and trace minerals including Al ₂ O ₃ , Fe ₂ O ₃ , TiO ₂ , CaO, MgO, Na ₂ O, K ₂ O, ...	N/A	Balance

4. First Aid Measures

Eye Exposure: Immediately flush eyes with copious amounts of water for a minimum of 15 minutes.

Seek immediate medical attention if adverse effect occurs.

Skin Exposure: Wash skin with soap and water. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Seek medical attention if adverse effect occurs.

Inhalation: Remove person to fresh air. If necessary, use artificial respiration.

Ingestion: If the material is swallowed, seek medical attention or advice.

5. Fire Fighting Measures

Quartz Surface Products can be combusted only with difficulty. Decomposition products resulting from the polymer and pigments degrading at elevated temperatures include various hydrocarbons, carbon dioxide, carbon monoxide and water. Fumes of metal oxides and mica particles could also be released.

Extinguishing Media

Water, Dry Chemical, CO₂, Foam.

Fire Fighting Instructions

Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus.

6. Accidental Release Measures

Cleanup and Disposal of Spill: Solid slabs can simply be gathered as necessary. If large amounts of dust or wastes are created by cutting process, vacuum or sweep up material avoiding dust generation or dampen spilled material with water to avoid airborne dust. Wear sufficient respiratory protection and protective clothing where necessary. If large quantities of this material enter the waterways contact the Environmental Protection Authority, or local Waste Management Authority. Dispose of waste in accordance with local, state and federal regulations.

7. Handling and Storage

Handling/Storage: Avoid breathing dust. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water. Good industrial hygiene practices should be followed when handling this material. Product is heavy and breakable; handle with care to avoid injury and prevent damage

8. Exposure Controls / Personal Protection

Engineering Controls: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS.

Respiratory Protection: If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Standard (29 CFR 1910.134), applicable U.S. State regulations, or the Canadian CSA Standard Z94.4-93 and applicable standards of Canadian Provinces.

Eye / Face Protection: During cutting, grinding or sanding operations safety glasses with side shields or goggles should be worn.

Skin Protection: During cutting, grinding or sanding operations use body protection appropriate for task including work gloves if handling sharp or rough edges and steel-toed shoes if lifting product.

9. Physical and Chemical Properties

Physical Appearance: Multi-colored engineered stone

Odor: None

pH: NA

Specific Gravity/Density: 2.2-2.5

Water Solubility:	Insoluble
Melting Point:	NA
Freezing Point	NA
Boiling Point:	NA
Vapor Pressure:	NA
Percent Volatiles by Volume:	NA
Evaporation Rate:	NA
Viscosity:	ND
Flash Point:	450°C.
Explosion Limits:	Lower: ND Upper: ND
Autoignition Temp:	At temperatures >450°C, this product will auto ignite.

10. Stability and Reactivity

Chemical Stability: Stable

Conditions to Avoid: None

Materials / Chemicals to Be Avoided: This product is incompatible with hydrofluoric acid. Silica will dissolve in hydrofluoric acid and produce the corrosive gas silicon tetrafluoride.

Hazardous Decomposition Products: Upon decomposition, various hydrocarbons, carbon dioxide, carbon monoxide fumes, and water may be released.

Hazardous Polymerization: Will not occur.

11. Toxicological Information

The powder generated in the manufacturing processes contains silica (SiO₂). Prolonged and/or massive inhalation of crystalline silica can cause pulmonary fibrosis and pneumoconiosis and silicosis, as well as a worsening of other pulmonary diseases (bronchitis, emphysema, etc.). The main symptom of silicosis is the loss of pulmonary capacity. People with silicosis have a greater risk of getting lung cancer.

12. Ecological Information

Environmental Fate: Not Determined

Environmental Toxicity: Not Determined

ISO 14001 Certification: Vicostone is ISO 14001 certified for Environmental Management Systems.

Certified by GreenGuard for Indoor Air Quality: Yes

Certified by GreenGuard for Children and Schools: Yes

Tested and Certified by GreenGuard for Microbial Resistance under ASTM D 6329-98 (2003):
Yes, resistant to Mold Growth

Certified by NSF under ANSI051 for Splash/Food Zone: Yes

13. Disposal Considerations

Waste Disposal Method: Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from

federal disposal regulations. Dispose in accordance with federal, state and local requirements.

14. Transportation Information

US Department of Transportation	Proper Shipping Name	Not Regulated
	Hazard Class	Not Regulated
	ID Number	Not Regulated
	Packing Group	Not Regulated

15. Regulatory Information

Federal Regulations:

SARA Title III Hazard Classes:

Fire Hazard:	No
Reactive Hazard:	No
Release of Pressure:	No
Acute Health Hazard:	No
Chronic Health Hazard:	Yes

TSCA: All components of this product are on the TSCA inventory or are exempt from TSCA Inventory requirements

U.S. State Regulations: California Prop 65 List: Crystalline silica (quartz) is classified as a substance known to the state of California to be a carcinogen.

16. Other Information

National Fire Protection Association NFPA(R) and Hazardous Materials Identification System (HMIS) Hazard Ratings:

Health Hazard:	1
Flammability:	0
Reactivity:	0

Key Legend Information:	IDLH – Immediately Dangerous to Life and Health
N/A – Not Applicable	
ND – Not Determined	PEL – Permissible Exposure Limit
ACGIH – American Conference of Governmental Industrial Hygienists	TWA – Time Weighted Average
OSHA – Occupational Safety and Health Administration	STEL – Short Term Exposure Limit
TLV – Threshold Limit Value	NTP – National Toxicology Program
	IARC – International Agency for Research on Cancer

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