

# HEALTH GUIDELINE FOR CRYSTALLINE SILICA

### INTRODUCTION

This guideline is intended to be a source of information and recommendation for the health and safety of workers and employees involved in cutting, sawing, grinding, drilling, crushing and installation of VICOSTONE<sup>®</sup> Quartz Surfaces.

VICOSTONE<sup>®</sup> Quartz Surfaces, as with other stone products, contains crystalline silica, a material known to the State of California to cause cancer. VICOSTONE strongly encourages fabricators and installers to strictly adhere to the recommendations in this guideline to control silica dust exposure and reduce health risks.



### ABOUT CRYSTALLINE SILICA

Formula: SiO2.

Synonyms: Quartz, coesite, cristobalite, tridymite.

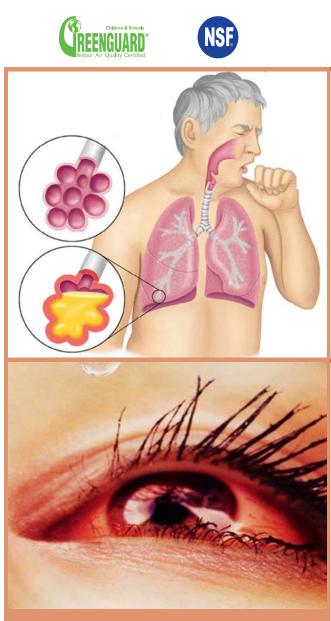
Appearance and odor: Colorless, odorless solid (Crystalline silica may be a component of many mineral dusts).

## HEALTH HAZARDS OF SILICA

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VICOSTONE<sup>®</sup> Quartz Surfaces are perfectly safe for delivery, storage and use as certified by GREENGUARD (for indoor air quality, children and schools) and by NSF for safe food contact as per ANSI 051.

However, as with other stone products, VICOSTONE<sup>®</sup> Quartz Surfaces contain crystalline silica (quartz), a material known to the State of California to cause cancer and link to other diseases, such as tuberculosis, chronic obstructive pulmonary disease, kidney and autoimmune disease if appropriate precautions and protective measures are not properly employed.



#### BREATHING SILICA CAN CAUSE SILI-COSIS

Silicosis is a lung disease where lung tissue around trapped silica particles reacts, causing inflammation and scarring and reducing the lung's ability to take in oxygen. Workers who breath silica day after day are greater risk of developing silicosis. Silica can also cause lung cancer and has been linked to other diseases, such as tuberculosis, fibrosis of the lungs, chronic obstructive pulmonary disease (COPD) and kidney disease.

CRYSTALLINE SILICA CAN CAUSE AN ABRASION OF THE CORNEA AND IRRITATION OF THE SKIN AND EYES

### EMERGENCY FIRST AID PROCEDURES









#### EYE EXPOSURE

If crystalline silica dust gets into the eyes, wash eyes immediately with large amounts of pure water, lifting the lower and upper lids occasionally. If irritation persists after washing, get medical attention.

#### BREATHING

If a person breathes in large amounts of crystalline silica dust, move the exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Keep the affected person warm and comfortable. Get medical attention as soon as possible!

#### RESCUE

In the event of an emergency, move the affected person from the hazardous exposure. Perform emergency rescue procedures such as artificial respiration and send for first aid or assistance.

Notify others and put into effect the established emergency rescue procedures.

# HOW TO ELIMINATE OR CONTROL CRYSTALLINE SILICA DUST

VICOSTONE recommends the following measures to reduce exposure to crystalline silica in the workplace.

#### IDENTIFY WORK AREAS, TASKS AND EQUIPMENT THAT EXPOSE WORKERS TO CRYSTALLINE SILICA DUST

Post warning signs to mark the boundaries of work that may expose workers to crystalline silica.

The signs should warn workers about silica health hazards.



#### USE SHAPE AND WET TOOLS IN FABRICATION AND INSTALLATION TO SUBSTAN-TIALLY REDUCE THE AMOUNT OF DUST CREATED

The use of wet tools is recommended as an effective method to control silica dust. Wet processes significantly reduced worker exposure to respirable crystalline silica

Processing and fabrication of VICOSTONE<sup>®</sup> Quartz Surfaces, such as cutting, polishing, drilling, grinding, etc., should be done with water injected tools. It is also essential to pay attention to electrical risks and recommend that all workers wear rubber boots when working.



### CONTROL DUST EXPOSURE BY USING ENGINEERING CONTROLS AND CONTAINMENT METHODS

Use local exhaust ventilation (LEV) system to collect silica dusts and prevent dust escape.

Install dust collection systems on machines or equipment that can release dust.



#### USE PERSONAL PROTECTIVE EQUIPMENT WHEN NECESSARY

Wear proper apparel such as dust masks, gloves, eye and ear protection and high visibility jacket in worksite.

Use respirators as a special type of personal protective equipment. Respirators may protect workers from inhaling crystalline silica dust when carefully and properly selected, worn and used. (For more information, see OSHA's Safety and Health Topics page and eTool on respiratory protection).

#### PROVIDE TRAINING AND INFORMATION TO WORKERS ABOUT THE HAZARDS OF SILICA AND OTHER CHEMICAL

#### Make sure that all workers receive training that includes the following:

Information about the potential adverse health effects of silica exposure

Instruction about obeying signs that mark the boundaries of work areas containing crystalline silica.

Instruction about practicing good personal hygiene, for example, washing their hands after working with materials containing silica, changing into clean clothes before leaving the worksite.



Information about the importance of engineering controls, personal hygiene, and work practices in reducing crystalline silica exposure.

Instruction about the use and care of protective equipment .

#### PROVIDE PERIODIC MEDICAL EXAMINATIONS FOR ALL WORKERS WHO MAY BE EXPOSED TO CRYSTALLINE SILICA DUST

Workers who may be exposed to crystalline silica dust should have regular medical exams. They should be examined before beginning their jobs and at least every three years thereafter. Normally, medical exams include:

A medial exam that focuses on the respiratory system and includes a work and medical history.

A chest X-ray and tuberculosis evaluations.



#### CONDUCT AIR MONITORING TO DETERMINE WORKER EXPOSURES TO SILICA

Air monitoring results are helpful to determine which jobs expose workers to silica above the permissible exposure limit and decide the best methods for controlling crystalline silica dust.

VICOSTONE ALWAYS FOSTER A SAFE AND HEALTHY WORK ENVIRONMENT FOR All Workers, free from any hazards and complying with all state And federal laws

VICOSTONE also recommends that all workers heighten awareness of their rights when it comes to creating and maintaining a safe work environment. All workers have the right to:

Work in conditions that do not pose a risk of serious harm.

Require all personal protective equipment when necessary.

Require the use of appropriate controls for crystalline silica-containing dust. Be sure to use all available engineering controls such as water sprays and ventilation of containment structures.

Receive information and training about workplace hazards, methods to prevent them and the OSHA standards that apply to their workplace.

Obtain copies of test results that detect and measure hazards. Exercise their rights under law, without retaliation or discrimination.

#### LEGAL COMPLIANCE AND SAFETY REQUIREMENTS

This guideline is considered a part of a product manual for VICOSTONE<sup>®</sup> Quartz Surfaces. All fabricators of VICOSTONE understand that they are responsible for reviewing and complying with all information mentioned in this guideline.

Fabricators and installers are to be aware that VICOSTONE<sup>®</sup> Quartz Surfaces, as other stone products, contains crystalline silica, a material known to the State of California to cause cancer. Therefore, *all fabricators and installers of VICOSTONE are obligated to comply with all local and other applicable rules, regulations, ordinances and laws regarding the application, handling, storage, fabrication and disposal of VICOSTONE<sup>®</sup> Quartz Surfaces. VICOSTONE strongly recommends that fabricators and installers strictly adhere to the requirements of the International Labor Organization (<u>http://www.ilo.org</u>), Occupational Safety and Health Administration (<u>www.osha.org</u>), US National Institute for Occupational Safety and Health (<u>http://www.cdc.gov/niosh/</u>), The Safe Work Australia (<u>http://www.safeworkaustralia.gov.au</u>/), and the European Network for silica (<u>http://www.nepsi.eu</u>) as well as recommendations in this Health Safety Guideline to control silica dust exposure and reduce health risks. <i>For further information, please consult local Distributor of this Product.* 

#### ACKNOWLEDGEMENT AND AGREEMENT

This guide is intended to be a source of information and recommendation for the health and safety of workers and employees involving in cutting, sawing, grinding, drilling, crushing and installation of VICOSTONE<sup>®</sup> Quartz Surfaces.

VICOSTONE<sup>®</sup> Quartz Surfaces, as other with stone products, contains crystalline silica, a material known to cause cancer. VICOSTONE requires fabricators and installers to read, understand and strictly adhere to the recommendations in this guideline to control silica dust exposure and to reduce health risks.

We ask you to acknowledge this document by signing below. This states that required information of crystalline silica has been provided to you and that the health hazards of silica have been explained to you. You are also aware of the methods that can eliminate and control crystalline silica in the workplace.

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#### NAME OF DEALER/FABRICATOR :

#### SIGNATURE OF DEALER/FABRICATOR :

DATE : / /