

What is Silica?

- Silica is quartz, and is found naturally in almost all rock, sand, soil, brick and concrete products
- Respirable crystalline silica particles penetrate deep into the lungs causing lung disease
- Silica exposure remains a serious threat to nearly 2 million U.S. working, including more than 100,000 workers in high risk jobs such as abrasive blasting, foundry work, stone-cutting, rock drilling, quarry work and tunneling



Silica Health Hazards



Symptoms	
Shortness of breath Loss of appetite Chest pains	Fatigue Severe Cough Cyanosis (bluish skin)
Silicosis A non-reversible lung disease with diffuse nodular pulmonary fibrosis Acute Silicosis Chronic Silicosis Accelerated Silicosis	COPD <i>(Chronic obstructive pulmonary disease)</i> A lung disease that causes obstructed airflow from the lungs by becoming thick and inflamed while air sacs lose their elastic quality. Too much mucus is made and blocks airways

Respirable Crystalline Silica

29 CFR 1926.1153. Changes the PEL from 250 micrograms to 50 micrograms per cubic meter of air (50µ/m3) as an 8-hour time-weighted average (TWA) under any foreseeable conditions. This will be enforced effective June 23, 2017.

Learn more at www.iComplySilica.com

Where is Silica?

- Concrete
 - Sand
 - Mortar
 - Overlay Products
- Terrazzo
 - Stone
 - Brick
 - Grout
- Stucco
 - Thinset
 - Rock
 - Block
- Drywall
 - Self Levelers
 - Color Hardner
 - These are only a few...

OSHA® UPDATED FINES FOR 2017		
Type of Violation	Current Maximum Penalty	NEW Maximum Penalty
Serious	\$7,000 per violation	\$12,471 per violation
Failure to Abate	\$7,000 per day	\$12,471 per day
Willful or Repeated	\$70,000 per violation	\$126,000 per violation

Pullman Ermator

We are Here to Help

Pullman Ermator and its team of experts from numerous industries are here to help. With its iComply program we can help the contractor through our distribution chain with OSHA compliance.

Contact us at iComplysilica.com
or directly at 855.736.2869

How do I Comply?

- Exposure determination
 - Use Table 1 or Monitor exposure
 - Create a written exposure plan
 - Designate a competent person
- Provide medical surveillance
 - Provide proper training
 - Required recordkeeping
 - Use proper HEPA dust collection

Go to www.iComplysilica.com
To see a list of presentations to find one near you

Table 1 Example

Equipment/Task	Engineering & Work Practice Control Methods	Required Respiratory Protection & Minimum Assigned Protection Factor (APF)	
		≤ 4 hrs/shift	> 4 hrs/shift
(xiii) Walk-behind milling machines and floor grinders	Use machine equipped with integrated water delivery system that continuously feeds water to get grinding surface	None	None
	OR Use machine equipped with dust collection system recommended by the manufacturer. Dust collector must provide the airflow recommended by the manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism. When used indoors or in an enclosed environment, use a HEPA filtered vacuum to remove loose dust in between passes	None	None

How to Choose a HEPA Vacuum

Important points of requirements

- High quality HEPA filters that are tested and certified, with a rating of at least 99.99 at 0.3 micron
- 25 CFM PER BLADE INCHES REQUIRED FOR HAND GRINDERS
- High CFM & Water Lift for proper matching to equipment
- Must have a mechanical filter cleaning method, contained allowing no dust to escape
- Multi levels of filtration, that include a cyclonic chamber, pre-filters, HEPA's and pre-separators
- Drop down bagging containment systems, no dust can or tray
- **Availability to attach tools for collection at the source**
- Wet and dry availability when needed

“The tools that we need to protect workers are already out there. They’re available. They’re not prohibitively expensive, and they need to be implemented.”

-Deven Johnson
Director of Training, Health and Safety for the Operative Plasterers’ and Cement Masons’ International Association

Dust Extraction Systems For All Industries