SKC

Silica Sampling Solutions

Make Your Compliance Easier

OSHA's New Crystalline Silica Rule means **greater health protection for workers** from exposure to respirable crystalline silica, which is known to cause health effects such as silicosis, lung cancer, COPD, and kidney disease in construction, maritime, and general industries.

This new rule also means **new requirements for employers**. Some of the key provisions in the new OSHA Silica Rule are:

☑ **OSHA lowers the Permissible Exposure Limit (PEL)** for respirable crystalline silica to 50 µg/m^3 of air averaged over an eight-hour shift (time-weighted average [TWA]). Worker exposure is determined through compliance air sampling with laboratory analysis of all three forms of crystalline silica (quartz, cristobalite, and tridymite). If samples are found to be above the PEL, employers must reassess exposures every three months.

☑ **OSHA issues an Action Level of 25 µg/m^3 as a TWA.** Exposure at this level is determined using the same compliance air sampling as for the PEL. Employers are obligated to perform initial silica monitoring unless able to demonstrate objectively that there is no airborne silica above the Action Level. If initial monitoring shows silica above the Action Level, the employer must reassess exposures every six months.

☑ **Silica samples must be analyzed by laboratories that meet specific accreditation criteria.**

☑ **OSHA requires employers to develop a written exposure control plan and use engineering controls to limit worker exposure,** train workers on risks of and limiting exposure to silica, and offer medical exams to highly exposed workers.

☑ **Through compliance air sampling, employers should determine areas with potential for exposure** and create regulated areas with limited access.

All of these requirements can be overwhelming. It is little wonder that professionals like you are looking for simple, complete, and cost-effective ways to comply with the new OSHA Silica Rule.

SKC can help you with your compliance plan by providing:

- **Complete, easy-to-use Silica Sampling Kits** that contain the equipment you need to perform compliance sampling — *See pp. 2-3.*

- **The direct-reading SM-4000 Silica Monitor** that is factory calibrated to silica and used to complement compliance air sampling, help identify high exposure work areas and tasks, indicate peak exposures, and show effectiveness of controls — *See p. 4*

See more inside!

Convenient SKC Silica Sampling Kits

for Compliance Air Sampling

SKC Silica Sampling Kits make compliance monitoring of airborne silica concentrations easy. Simply choose an SKC Silica Sampling Kit to make it your complete silica sampling toolbox that includes:

- **PPI Preloaded Respirable Dust Samplers** collect the sample
  - Listed in the OSHA Final Silica Rule
  - Preloaded with method-specified 5.0-µm PVC filter/support
  - Disposable anti-static plastic

- **SKC Air Sample Pump** provides 2 L/min flow rate for PPI Samplers
  - **AirChek TOUCH Pump** - Fully programmable, touch screen, and Li-Ion battery, in Deluxe Kit
  - **AirChek 52 Pump** - Turn-on-and-sample, NiMH battery, in Basic Kit

- **Calibration and sampling accessories**
  - **chek-mate electronic pump calibrator** with NIST certificate, in Deluxe Kit
  - **Calibrated rotameter** with NIST certificate, in Basic Kit
  - Pump charger, tubing, sampler calibration adapter, instructions, and tool case included with both kits

Deluxe Silica Sampling Kit
Cat. No. 220-5000TC-K-S

Includes AirChek® TOUCH Sample Pump, standard charging cradle with cord, 10 Disposable PPI Samplers preloaded with 5.0-µm PVC filter/support (for use at 2 L/min), 3-foot and 1-foot pieces of tubing, calibration adapter, chek-mate Calibrator with NIST certificate, instructions, and tool case (*shown above*)

Click to order!

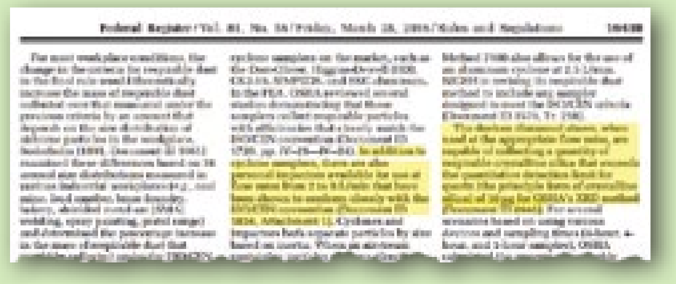
Basic Silica Sampling Kit
Cat. No. 224-52K-S

Includes AirChek 52 Sample Pump, PowerFlex Single Charger with cable, 10 Disposable PPI Samplers preloaded with 5.0-µm PVC filter/support (for use at 2 L/min), 3-foot and 1-foot pieces of tubing, calibration adapter, rotameter with NIST certificate, instructions, and tool case

Click to order!

For additional PPI Samplers, sample pumps, chek-mate Calibrators, and rotameters, go to www.skcinc.com.

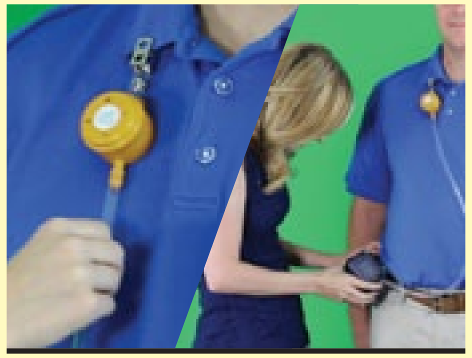
OSHA Identifies PPI Samplers as Meeting Requirements for Compliance Silica Sampling



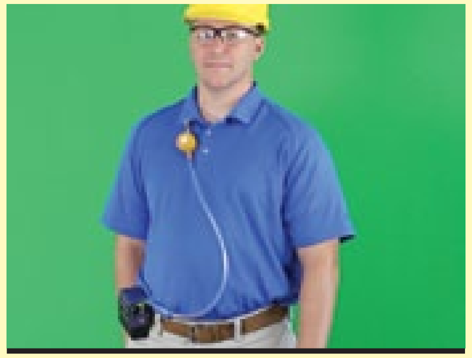
OSHA refers to SKC PPI Respirable Dust Samplers on page 16439 in its Final Crystalline Silica Rule as "personal impactors available for use at flow rates from 2 to 8 L/min that have been shown to conform closely with the ISO/CEN convention."

Collecting a Silica Sample is as easy as 1, 2, 3!

❶ **Set and verify** pump flow rate using the kit calibrator.



❷ **Clip** PPI Respirable Dust Sampler to worker's collar and pump to worker's belt.



❸ **Collect a sample** by running the pump for the work shift or other desired sampling period.

At the end of the shift, turn off pump, remove/seal PPI Sampler, and package sampler with unexposed PPI Sampler (blank). Use calibrator to verify pump flow rate remained within ± 5%. Ship samples to an accredited laboratory for analysis. See SKC Silica Analysis Laboratory List.

SKC Silica Sampling Resources

SM-4000 Direct-reading Silica Monitor

Complements Compliance Silica Sampling

The Silica Monitor SM-4000 is a direct-reading personal dust monitor optimized for measuring silica at current OSHA levels. The SM-4000 is calibrated to a known amount of silica dust, measures down to 1 µg/m^3 with high precision, and maintains a monitoring history (datalogs) for record keeping. Real-time silica measurements are displayed in µg/m^3 – no calculations needed. The SM-4000 also features an internal pump so you can collect a respirable dust sample with a cyclone and filter for laboratory analysis along with the direct-reading option.

The SM-4000 direct-reading personal silica monitor can help you:

- Perform quick and easy screening of exposure levels for instant feedback on the need to control exposure
- Choose personal protective equipment
- Evaluate effectiveness of controls
- Detect peak levels and transient changes in concentration associated with specific worker tasks

Direct-reading Silica Monitor Kit

Cat. No. 770-700

Includes SM-4000 monitor, respirable cyclone, filter cassette, zeroing filter, computer cable and serial-to-USB adapter cable, charger (110-240 V), CD with instruction manual and software (compatible with Windows® XP, 7, 8, and 10), and carry case

Additional accessories are available.

Click to order!

SKC Silica Sampling Resources

Making Silica Sampling Simple

In addition to SKC silica sampling and monitoring equipment, SKC offers free online resources as part of its silica sampling solutions. Our goal is to help you perform successful air sampling to determine worker exposure to respirable crystalline silica.

How to Sample with PPI – Video

OSHA Silica Page

OSHA Small Entity Compliance Guide for the Respirable Crystalline Silica Standard for Construction

OSHA Small Entity Compliance Guide for the Respirable Crystalline Silica Standard for General Industry and Maritime

Sample Setup Guide – Disposable PPI

SKC NIOSH/OSHA/ASTM Sampling Guide

Visit www.skcinc.com!
Your Essential Source for Silica Samplers, Monitors, and Resources