

Crystalline Silica

Crystalline silica is a common mineral found in many naturally occurring and man-made materials used in the construction of hardscape projects. Materials like sand, concrete, brick, block, stone and mortar contain crystalline silica. When workers cut, grind, drill, or crush materials that contain crystalline silica, very small dust particles, known as “respirable crystalline silica” or RCS, are created. RCS is typically invisible to the eye because it is at least 100 times smaller than ordinary sand found on beaches or playgrounds. So when you see material suspended in the air, it may just be nuisance dust or it may contain RCS.

OSHA (website hyperlinks in blue)

On September 23, 2017, the new [OSHA standard \(29 CFR 1926.1153\)](#) went into effect limiting worker exposures to RCS and requiring employers to take steps to protect workers from RCS exposure. Employers can either use a control method laid out in **Table 1** of the OSHA standard (found in link above), or they can measure workers’ exposure to RCS and independently decide which dust control practices work best to limit exposures to below the permissible exposure limit (PEL) in their workplaces.

There are 2 levels of exposure to note:

- **Action Level** - 25 µg/m³ (micrograms of RCS per cubic meter of air), averaged over an 8-hr day.
 - ◊ If levels are suspected to be above the action level, site testing should be conducted.
- **PEL** - permissible exposure limit of 50 µg/m³, averaged over an 8-hour day.
 - ◊ Employers must protect workers from RCS exposures above the PEL.

Please consult [OSHA Standard 29 CFR 1926.1153](#) for further recommendations/requirements.

OSHA resource documents:

- [OSHA 3902](#) “Small Entity Compliance Guide for the Respirable Crystalline Silica Standard for Construction”
- [OSHA 3681](#) “Respirable Crystalline Silica Fact Sheet”

Answers to questions employers and workers may have can be found in [OSHA’s Publications](#).

To reach your regional or area OSHA office, go to the [OSHA Offices by State](#).

Additional information and resources can be found at [‘Work Safely with Silica’](#).

SEK Products

Certified Lab Testing has demonstrated that Polysweep’s, X-Treme Wide Joint Polysweep’s, and SEK-Surebond Joint Sand’s level of RCS (Respirable Crystalline Silica) is BELOW reportable limits under normal use. However, care must be taken by the user not to subject this product to high-energy operations like drilling, sawing, grinding, crushing, etc. which could create RCS in excess of the permissible exposure limit (PEL).

What does this mean for you?

You can continue to promote and sell Polysweep, X-Treme Wide Joint PolySweep, and SEK Joint Sand without the concern of RCS. To reduce the possible creation of RCS during installation, follow **SEK-Surebond’s** installation best practices by minimizing the amount of sand left on the surface prior to compaction.