

# PRACTICE UPDATE

## Managing the risks of respirable crystalline silica from engineered stone in the workplace

**Scope:** This code of practice is aimed at the construction industry on the use of engineered stone for benchtops and other related furniture, however its guidance could be applied to other work areas and industries.

**Definition:** Engineered stone is created by combining natural stone materials containing crystalline silica (e.g. quartz) with resin, pigments, or water to make a solid product. It does not include concrete/cement or their products, bricks/pavers, blocks, roof/wall/floor tiles or porcelain or stone in its' natural form.

**Key Information:** Generated from crushing, cutting, sanding, polishing quartz-containing stone.

Small particles of dust (<10µm diameter) able to get deep into lungs, leading to:

- Silicosis (inflammation and scarring)
- Chronic Obstructive Pulmonary Disease
- Lung cancer
- Progressive fibrosis
- Reduced O2 absorption

GHS classified as hazardous chemical, with an **8hr TWA WES of 0.05mg/m3**. Carcinogenic to humans (Class 1A), no known safe exposure limit.

**Actions:** Work on engineered stone meets the criteria for high-risk construction work as it will create a contaminated atmosphere due to dust production. A Safe Work Method Statement (SWMS) needs to be created to identify and control the risks, provided to all involved parties, and monitored for continual effectiveness of those controls. SWMS should identify appropriate controls including airborne contaminant monitoring and respiratory protection that meets AS/NZS 1716:2012.

**The presence of facial hair can interfere with proper fit of respiratory protection** – fit testing may be necessary.

### **References:**

[Managing the risks of respirable crystalline silica from engineered stone in the workplace](#)

[Work Health and Safety \(General\) Regulations 2022](#)

### **Who do you call with questions?**

If you have any queries, please contact Health and Safety on 9266 4900 or email [healthandsafety@curtin.edu.au](mailto:healthandsafety@curtin.edu.au).

### **Date of Issue**

20/09/2022