

## **Silica Safety Guidelines for Clays and Plasters**

Clays used in ceramics and pottery are composed of one or more minerals and may contain up to 40-50% silica. Some plasters may also contain silica for added texture. Crystalline silica has been classified as a human lung carcinogen. Additionally, breathing crystalline silica dust can cause silicosis, which in severe cases can be disabling, or even fatal. The respirable silica dust, which is such a fine dust that it may be invisible under normal lighting, enters the deepest part of the lungs and causes the formation of scar tissue, reducing the lungs' ability to take in oxygen. For these reasons, it is important to keep inhalation exposures to silica as low as possible.

### **Reduce exposures to crystalline silica by:**

- Knowing what ingredients are in the clays and plasters you are using (the Safety Data Sheet will provide this information)
- Using plaster with the lowest percentage silica possible
- Mixing plaster under exhaust ventilation if greater than 1% silica

### **For working with clay:**

- Purchasing premixed, wet clay
- Purchasing clay with the lowest percentage silica - ask suppliers if there is a "low free silica" clay available
- Ensuring clay mixers are equipped with local exhaust ventilation
- Storing and mixing clay in a separate room, whenever possible
- Working in rooms where there is good ventilation
- Finishing greenware while still wet or damp with a fine sponge instead of sanding when dry (do not sand greenware containing fibrous talc)
- Covering unfinished clay products when not in use
- Avoiding crushing of dry scrap
- Cleaning surfaces and floors daily – do not dry sweep! Use a wet sponge/mop or a HEPA vacuum only

### **Additional Precautions:**

- Wear separate work clothes while in the studio and wash them regularly
- Consider wearing a dust mask when mixing dry clay or during any other operation where dusts may be generated
- Never use compressed air to clean to remove any dust from clothing or surfaces