

Calcium Oxide

What is it:

Calcium oxide (CaO), also known as quicklime, is a widely used derivative of calcium carbonate (limestone). Calcium oxide is used directly in water treatment for precipitative softening and sludge treatment, and as an input in the manufacturing of calcium hydroxide.



How is it used:

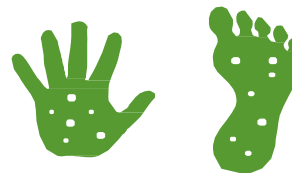
Calcium oxide (quicklime) has a wide range of applications. The leading domestic use of lime is as an agent to remove impurities as part of steel manufacturing. Lime also has environmental remediation applications including treatment of acid mine drainage and heavy metal contamination, as well as construction applications including soil stabilization, asphalt manufacturing, as a component of mortar and plaster, and alkali chemical manufacturing.

How do you know you have been exposed:

Workers in industries that use calcium oxide are the most likely to be exposed. Direct exposure to calcium oxide could cause burns on the skin, eyes, or mucous membranes.

How can you reduce the risk of exposure:

Knowing the sources and uses of calcium oxide can better prepare workers to use it safely. Workers should protect themselves following safety guidelines such as protective clothing and eyewear. Showering and changing clothes before going home can lower exposure and prevent dust from entering the home.



Greater Detail: The greatest risk comes from ingestion. Do not eat and drink if you have known exposure to calcium oxide. Always wash hands and body before eating if you are working with chemicals like calcium oxide.

Source: Environmental Protection Agency. Water Treatment Chemical Supply Chain, National Oceanic and Atmospheric Administration. Cameo Chemicals for Calcium Oxide.