



HEALTH AND SAFETY DATA

Quicklime

RJ 5.01B

Product Names:

Quicklime, Calbux 90, Singleton Birch Fine Lime 2, Microlime 90

Description:

White or creamy white powders produced by the calcination of limestone or chalk in a kiln at a temperature of at least 8500C. Kiln temperatures are often significantly higher. Quicklime is hydrated or slaked to produce lime putty, limewash and hydrated lime, and there is renewed interest in the hot-mix mortar method where quicklime and sand or aggregate are mixed with water and either used immediately whilst hot or allowed to cool before use.

Composition:

Calcium oxide. CAS: 1305-78-8. EINECS: 215-138-9.

Pure quicklime is Calcium oxide (CaO). It is non-hydraulic (meaning that the lime produced by hydration will not set underwater). Certain siliceous and argillaceous limestones when calcined at relatively low temperatures (<1000°C) will produce hydrated lime with hydraulic properties, containing silicates, aluminates and other trace elements. Unconverted limestone or chalk and small quantities of flint and/or quartz insolubles are often present.

Hazards Identification:

EXTREME CAUTION. FULL PPE ESSENTIAL.

Calcium oxide reacts exothermically with water to form Calcium dihydroxide. Reaction is often violent with boiling point reached rapidly.

Danger: H318 Causes Serious Eye Damage.
H315 Causes skin burns and irritation.

Warning: H335 May cause respiratory irritation.



First Aid Measures:

Eye Contact: Contact with eyes **MUST** be avoided. Highly alkaline. Remove contact lenses. Irrigate copiously with clean fresh water. Obtain medical attention immediately.

Skin Contact: Carefully brush the affected body surfaces to remove all traces of quicklime. Rinse with copious quantities of water and seek medical attention. When mixed with water, the highly alkaline paste can burn the skin, and cause allergic skin reactions in hypersensitive individuals. Always rinse skin after contact, and use protective creams against allergic symptoms.

Inhalation: Move person into fresh air. Obtain medical attention immediately.

Fire Fighting Measures:

Non-flammable.

Quicklime reacts with water and generates heat. This may cause risk to flammable material.

Accidental Release Measures:

Contain the spillage. Keep the material DRY if possible. Cover area if possible to avoid unnecessary dust hazard. Avoid uncontrolled spills to watercourses and drains (pH increase). Any large spillage into watercourses must be alerted to the Environment Agency or other regulatory body.

Handling & Storage:

Handling: Handle in ventilated areas and prevent dust diffusion. Wear dust mask. Protect eyes and skin. Do not inhale or ingest. Smoking, eating and drinking must be prohibited in areas of storage and use.

Storage: Observe product data precautions. Limited Shelf Life. Store in sealed bags in DRY storage. Protect from air and rain as quicklime reacts with water.



Exposure Controls/Personal Protection:

Provide adequate ventilation.

Eye Protection: Wear full eye protection at all times. Carry individual pocket eyewash.

Respiratory protection: Wear full face mask at all times.

Skin Protection: Wear work clothing that provides full protection, and nitrile protective gloves.

Physcial & Chemical Properties:

Physical State: White or creamy white fine powder.

pH: 12.5 in water

Solubility: Reacts to form Calcium dihydroxide

Environmental Information:

Limestone kilns are equipped with dust elimination filters. Do not allow quicklime to enter drains or water-courses.

Disposal:

Disposal of quicklime must be in accordance with local and national legislation.

Transport:

Not classified as dangerous for transport. The material must not be allowed to get wet.

Regulatory Information:

Danger symbol: Xi irritant product

Risk phases:
R37: Irritating to respiratory system
R38: Irritating to skin
R41: Risk of serious damage to eyes

Safety phases:
S2: Keep out of the reach of children
S25: Avoid contact with eyes
S26: In case of contact with eyes, rinse immediately with plenty of water and obtain immediate medical advice
S37: Wear suitable gloves
S39: Wear full eye and face protection