
Executive summary

At the request of the minister of Social Affairs and Employment, the Health Council of the Netherlands sets Health-Based Recommended Occupational Exposure Limits (HBR-OEL) for chemical substances in the workplace. These recommendations constitute the first step in a three-step procedure, which leads to legally binding occupational exposure limits. In this report, the Health Council discusses the consequences of occupational exposure to calcium oxide. The Council's conclusions are made on scientific papers published prior to April 2005.

Calcium oxide is a powdery substance, which is amongst others used in construction and agriculture. Calcium oxide is a caustic compound, which reacts violently and exothermically with water. Occupational exposure to calcium oxide may therefore cause severe irritation of the skin, eyes, and mucous membranes.

From the human data available, the Health Council concludes that irritation of, especially, the nose is the critical effect. Since there are no experimental animal data and since the available human data are inadequate, the Health Council considers the toxicological database on calcium oxide too poor to justify recommendation of a health-based occupational exposure limit.
