

Savinase

Savinase is an enzyme used in laundry detergent. Usually in Australia savinase is inactive in its encapsulated form until it gets wet.

NICNAS assessed savinase in February 1993. Savinase is the trade name of a particular proteolytic enzyme in the proteinase family. The assessment covered the whole family of proteinases (also known as subtilisins). These are the main findings of that assessment.

Proteinases are classed as Hazardous Substances.

Proteinases are not classified under the Australian Dangerous Goods Code.

Proteinase poisoning can occur by breathing in dust or from touching the substance.

Breathing proteinases causes occupational asthma and sore throat. Over time people become sensitised to proteinases and so symptoms are produced from exposure to lower doses.

Prolonged exposure to proteinases causes skin irritation.

Once someone has become sensitised to proteinases, they may develop allergic symptoms at levels not thought of as hazardous. It is not possible to determine a level below which sensitisation does not occur. It is important then to keep the atmospheric levels of proteinases as low as possible.

The national occupational exposure standard is set at 0.06 µg/m³ peak limitation.

RECOMMENDATIONS

Workers should be given a pre-employment medical check to determine a baseline for the identification of sensitisation as part of a workplace health surveillance program.

Ventilation should be adequate to ensure air levels are below the exposure standard and well maintained. Atmospheric monitoring should routinely be carried out.

Avoid generating dust during processes involving proteinases in the workplace.

More information on proteinases can be found in the Material Safety Data Sheet available from the supplier. The most comprehensive source of information is the detailed assessment of savinase published by the National Industrial Chemical Notification and Assessments Scheme (NICNAS). This is available free of charge by calling 1800 638 528. More information on the use of industrial chemicals can be found at the NICNAS website: www.nicnas.gov.au