

Sodium Hypochlorite - 10%, 12% to 13% - Liquid Chlorine

CAS Number 7782-50-5
UN 1017

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The most common asked question about chlorine is – How will chlorine affect me short term and long term.

I have consulted many organisations to compile this information, in particular the New Jersey Department of Health.

I have received other extracts from Dept. of Medicine, University of California San Francisco USA. which gives detailed explanation on the inhalation of chlorine. The result is not conclusive, however persons with airway hyperresponsiveness reacted to mild exposure.

Another document from Physiology Dept., Barcelona Spain assessed chlorine in swimmers during training in treated pool water.

The conclusion was that chlorine was possible in producing respiratory symptoms in swimmers, which needs further investigation.

The most direct report is from Division of Occupational & Environmental Medicine, University of California, San Francisco, USA. There were tests done on eight subjects who were monitored after a 15-minute exposure to either filtered air or 0.5 ppm chlorine in filtered air, administered through a nasal mask in a climate-controlled chamber.

Breathing chlorine can irritate the lungs causing coughing and/or shortness of breath. Higher exposures can cause a build-up of fluid on the lungs (pulmonary edema). It can also damage teeth and cause a skin rash.

The recommended airborne exposure limit is 0.5 ppm, which should not be exceeded during any 15-minute period.

Chronic Health Effects can occur at some time after exposure and can last for months or years.

Typical Severe Poisoning Symptoms

Symptoms of poisoning to the airways and lungs include coughing, wheezing and vomiting. In addition, burning of the eyes, ears, nose and throat can occur. The heart and blood vessels may be damaged if chest pain, low blood pressure, slow heartbeat and shock take place. Delirium and even coma are extreme symptoms of bleach inhalation or ingestion poisoning.

Conclusion

I could not find any detailed specific tests in Australia and had to rely on American data.

You are being exposed to a dangerous chemical on a daily basis. Please look after yourself because you are the one who will suffer the long term health affects.

It is very important to try and store Chlorine at temperatures below 16 degrees Celsius. If not it will deteriorate within a very short time

Always read the Material Safety Data Sheets on every chemical you handle or come in contact with Sodium Hypochlorite is rated under the Dangerous Goods and a Hazardous Substance under Occupational Health and Safety Act.