

1-tert-butoxypropan-2-ol

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Executive summary

Health Council of the Netherlands



The Health Council of the Netherlands assessed whether occupational exposure to 1-tert-butoxypropan-2-ol may induce genotoxic effects and may cause cancer. The assessment is performed by the Subcommittee on Classifying carcinogenic substances of the Dutch Expert Committee on Occupational Safety of the Health Council. On the website www.gezondheidsraad.nl, more information can be found on the tasks of this Committee. The composition of the Committee can be found on the last page of this assessment.

About 1-tert-butoxypropan-2-ol

1-tert-butoxypropan-2-ol is used as a solvent in all-purpose cleaning products, coatings, inks, adhesives, lacquers and latex paints. There is a potential for occupational exposure in places where 1-tert-butoxypropan-2-ol is produced or used.

Assessment of genotoxicity and carcinogenicity

Based on the available scientific literature, the Committee assesses the potential genotoxic and carcinogenic properties of the substance in question. If there are indications for such properties, it recommends classifying the substance in two hazard categories, which represent the weight of evidence that the substance is mutagenic in germ cells (a measure for genotoxicity), and that the substance is carcinogenic. The categories are based on the globally harmonized system criteria for assessing hazard categories, which are also used by the European Commission (EU-guideline (EG) 1272/2008). The recommendation can be used by the Minister of Social Affairs en Employment to decide whether the substance should be listed as mutagenic in germ cells and/or carcinogenic.

Evaluation of the data

No data on the carcinogenicity in humans are available. Mutagenicity was observed in vitro. No experiments in germ cells have been conducted. An NTP study did not yield sufficient evidence for carcinogenicity in rats. Mice exposed to 1-tert-butoxypropan-2-ol demonstrated an increase in liver malignancies.

Recommendation

The Committee recommends:

- not to classify 1-tert-butoxypropan-2-ol as a germ cell mutagen;
- to classify the substance as *suspected to be carcinogenic in humans*, which corresponds with a classification in category 2 and label with H351 (suspected of causing cancer).



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The Health Council receives most requests for advice from the Ministers of Health, Welfare and Sport, Infrastructure and Water Management, Social Affairs and Employment, and Agriculture, Nature and Food Quality. The Council can publish advisory reports on its own initiative. It usually does this in order to ask attention for developments or trends that are thought to be relevant to government policy.

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