

2,4-Dichloro-1-nitrobenzene 1,4-dichloro-2-nitrobenzene

No. 2018/24, The Hague, December 11, 2018

Executive summary

Health Council of the Netherlands



At request of the Minister of Social Affairs and Employment, the Health Council of the Netherlands evaluates and judges the genotoxic and carcinogenic properties of substances to which workers are occupationally exposed. The evaluation is performed by the SubCommittee on Classifying Carcinogenic Substances of the Dutch Expert Committee on Occupational Safety of the Health Council, hereafter called the Committee. In this report, the Committee evaluated 2,4-dichloro-1-nitrobenzene and 1,4-dichloro-2-nitrobenzene.

Identified uses

2,4-Dichloro-1-nitrobenzene is used as an intermediate for the synthesis of pigments, pesticides and medicinal drugs. 1,4-Dichloro-2-nitrobenzene is used as an intermediate for the synthesis of pigments, pesticides and UV absorbents.

Classification according to strength of evidence for toxic effect

For the judgement on the carcinogenic properties of a substance, the Committee uses a classification system, which is largely based on EU-Directive 1272/2008. In addition to classifying substances on carcinogenicity, the Committee also assesses the genotoxic properties.

Recommendations to the State Secretary

Based on the available scientific data, the Committee concludes that 2,4-dichloro-1-nitrobenzene and 1,4-dichloro-2-nitrobenzene are presumed to be carcinogenic to man, and recommends classifying both compounds in category 1B^a (the substances are presumed to

^a See Annex A (carcinogenicity) and B (mutagenicity) for the classification system.

be carcinogenic to humans). The substances may act by a stochastic genotoxic mechanism of action.

Based on insufficient data, the Committee does not recommend a classification as germ cell mutagens.



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Preferred citation:

Health Council of the Netherlands. 2,4-Dichloro-1-nitrobenzene and 1,4-dichloro-2-nitrobenzene. The Hague: Health Council of the Netherlands, 2018; publication no. 2018/24.

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