CAS 95-80-7 **2,4-Diaminotoluene** C₇H₁₀N₂





Summary of Health Effects

2,4-diaminotoluene causes cancer in animals and may cause cancer in humans.

How is 2,4-diaminotoluene used?

2,4-diaminotoluene is used to make other chemical ingredients used in polyurethane, paints, varnishes, adhesives and foams.¹

Toxicity: What are its health effects?

The EPA classified 2,4-diaminotoluene as a probable human carcinogen.¹ The National Toxicology Program has stated that 2,4diaminotoluene is reasonably anticipated to be a human carcinogen.² The International Agency for Research on Cancer has concluded that 2,4diaminotoluene is possibly carcinogenic to humans due to liver and mammary gland tumors in rats and mice.³ 2,4-diaminotoluene is included on California's Proposition 65 list as a carcinogen.⁴ The European Commission Joint Research Centre determined 2,4-diaminotoluene to be toxic to genetic material.⁵

Exposure: How can a person come in contact with it?

A person can come in contact with 2,4diaminotoluene by breathing in contaminated air, eating and drinking contaminated food and water, or from skin contact with consumer products.²

2,4-Diaminotoluene is used in the production of toluene diisocyanate, which is used to make polyurethane, a synthetic resin used in paints, varnishes, adhesives, and foams.¹

The 2014 Nation Health and Nutrition Examination Survey (NHANES) report did not include data for 2,4-diaminotoluene.

References

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- 2. U.S. Department of Health and Human Services, National Toxicology Program (2014). *Report on carcinogens, thirteenth edition*. Retrieved from https://ntp/roc/content/profiles/diaminotoluene.pdf

- 3. World Health Organization, International Agency for Research on Cancer (1987). *IARC Monograph on the evaluation of carcinogenic risks to humans, supplement no 7: Overall evaluations of carcinogenicity: An updating of IARC monographs volumes 1 to 42.* Retrieved from monographs.iarc.fr/wp-content/uploads/2018/06/Suppl7.pdf
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- 5. European Commission, Joint Research Centre (2008). European Union Risk Assessment Report: 4-Methyl-Mphenylenediamine (toluene-2,4-diamine) risk assessment (CAS-No.: 95-80-7). Retrieved from echa.europa.eu/documents/10162/6434698/orats summary 4-methyl-m-phenylenediamine en.pdf