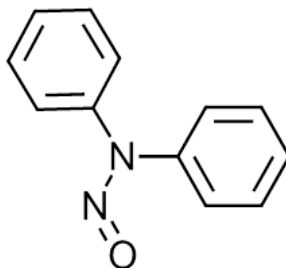


CAS 86-30-6

# N-Nitrosodiphenylamine

C<sub>12</sub>H<sub>10</sub>N<sub>2</sub>O



## Summary of Health Effects

Being exposed to N-nitrosodiphenylamine over a long period of time can cause cancer in animals, including bladder cancer and lymphoma, and may cause cancer in humans.

## How is N-nitrosodiphenylamine used?

N-Nitrosodiphenylamine is used to make rubber products.<sup>1</sup>

## Toxicity: What are its health effects?

N-nitrosodiphenylamine is classified by the Environmental Protection Agency (EPA) as a probable human carcinogen.<sup>2</sup> This is based on increased bladder tumors in male and female rats, an increase in reticulum cell sarcomas (a form of malignant lymphoma) in mice, and the chemical's structural similarity to nitrosamines (known carcinogens).<sup>2</sup> Animal studies involving

chronic exposure to high levels of N-nitrosodiphenylamine resulted in cancer of the bladder and changes in body weight.<sup>1</sup>

The EPA considers N-nitrosodiphenylamine to be a hazardous waste, and spills greater than 100 pounds must immediately be reported.<sup>1</sup>

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

A person can come in contact with N-nitrosodiphenylamine by breathing in contaminated air, drinking contaminated water, or through skin contact with contaminated soil.<sup>1</sup>

The 2014 National Health and Nutrition Examination Survey (NHANES) report did not include data for N-nitrosodiphenylamine.

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## References

1. Agency for Toxic Substances and Disease Registry (1993). *ATSDR Toxicological profile for N-nitrosodiphenylamine*. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Services. Retrieved from [www.atsdr.cdc.gov/toxprofiles/tp16.pdf](http://www.atsdr.cdc.gov/toxprofiles/tp16.pdf)
2. U.S. Environmental Protection Agency (1987). *Integrated Risk Information System (IRIS) for N-nitrosodiphenylamine*. Retrieved from [cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance\\_nmbr=178](http://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=178)