

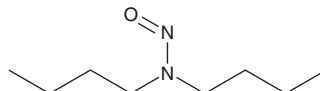
PRODUCT INFORMATION



N-Nitrosodibutylamine

Item No. 35474

CAS Registry No.: 924-16-3
Formal Name: N-butyl-N-nitroso-1-butanamine
Synonyms: NDBA, NSC 6830
MF: $C_8H_{18}N_2O$
FW: 158.2
Purity: $\geq 95\%$
Supplied as: A liquid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

N-Nitrosodibutylamine is supplied as a liquid. A stock solution may be made by dissolving the N-nitrosodibutylamine in the solvent of choice, which should be purged with an inert gas. N-Nitrosodibutylamine is soluble in acetone, dichloromethane, and ethanol.

Description

N-Nitrosodibutylamine is an N-nitrosamine.¹ It induces apoptosis and the production of reactive oxygen species (ROS) in HL-60 leukemia cells when used at concentrations of 10 and 20 mM.² N-Nitrosodibutylamine (0.05% in the drinking water) induces tumor formation in rats.³ It has been found in various food products, including fresh vegetables and pork, and influent and effluent of wastewater.^{1,4}

References

1. Park, J.-E., Seo, J.-E., Lee, J.-Y., *et al.* Distribution of seven N-nitrosamines in food. *Toxicol. Res.* **31(3)**, 279-288 (2015).
2. García, A., Morales, P., Arranz, N., *et al.* Induction of apoptosis and reactive oxygen species production by N-nitrosopiperidine and N-nitrosodibutylamine in human leukemia cells. *J. Appl. Toxicol.* **28(4)**, 455-465 (2008).
3. Okajima, E., Hiramatsu, T., Motomiya, Y., *et al.* Effect of DL-tryptophan on tumorigenesis in the urinary bladder and liver of rats treated with N-nitrosodibutylamine. *Gan.* **62(3)**, 163-169 (1971).
4. Krauss, M., Longrée, P., Dorusch, F., *et al.* Occurrence and removal of N-nitrosamines in wastewater treatment plants. *Water Res.* **43(17)**, 4381-4391 (2009).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM