

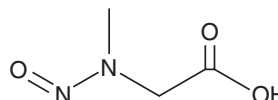
PRODUCT INFORMATION



N-Nitroso Sarcosine

Item No. 34734

CAS Registry No.: 13256-22-9
Formal Name: 2-(methylnitrosoamino)-acetic acid
Synonyms: MCMN,
N-Methyl-N-(carboxymethyl)nitrosamine
MF: C₃H₆N₂O₃
FW: 118.1
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

N-Nitroso sarcosine is supplied as a solid. A stock solution may be made by dissolving the N-nitroso sarcosine in the solvent of choice, which should be purged with an inert gas. N-Nitroso sarcosine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of N-nitroso sarcosine in these solvents is approximately 30, 10, and 15 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of N-nitroso sarcosine can be prepared by directly dissolving the solid in aqueous buffers. The solubility of N-nitroso sarcosine in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

N-Nitroso sarcosine is a carcinogen and nitrosation product of sarcosine (Item No. 26799) that has been found in cured meat products.^{1,2} *In vivo*, N-nitroso sarcosine (225 mg/kg) induces the formation of metastatic liver carcinomas in mice.²

References

1. Janzowski, C., Eisenbrand, G., and Preussmann, R. Occurrence of N-nitrosamino acids in cured meat products and their effect on formation of N-nitrosamines during heating. *Food Cosmet. Toxicol.* **16**(4), 343-348 (1978).
2. Wogan, G.N., Paglialunga, S., Archer, M.C., *et al.* Carcinogenicity of nitrosation products of ephedrine, sarcosine, folic acid, and creatinine. *Cancer Res.* **35**(8), 1981-1984 (1975).

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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