

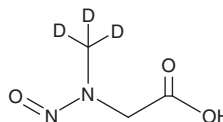
# PRODUCT INFORMATION



## N-Nitroso Sarcosine-d<sub>3</sub>

Item No. 34740

CAS Registry No.: 1189871-94-0  
Formal Name: N-(methyl-d<sub>3</sub>)-N-nitrosoglycine  
Synonyms: MCMN-d<sub>3</sub>,  
N-Methyl-N-(carboxymethyl)nitrosamine-d<sub>3</sub>  
MF: C<sub>3</sub>H<sub>3</sub>D<sub>3</sub>N<sub>2</sub>O<sub>3</sub>  
FW: 121.1  
Chemical Purity: ≥98% (Nitroso Sarcosine)  
Deuterium  
Incorporation: ≥99% deuterated forms (d<sub>1</sub>-d<sub>3</sub>); ≤1% d<sub>0</sub>  
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-d<sub>3</sub> is intended for use as an internal standard for the quantification of nitroso sarcosine by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

N-Nitroso sarcosine-d<sub>3</sub> is supplied as a solid. A stock solution may be made by dissolving the N-nitroso sarcosine-d<sub>3</sub> in the solvent of choice, which should be purged with an inert gas. N-Nitroso sarcosine-d<sub>3</sub> is soluble in chloroform, slightly soluble in methanol, and sparingly soluble in DMSO.

### Description

N-Nitroso Sarcosine is a nitrosamine.<sup>1</sup> It has been found in smoked and cured meats and tobacco smoke.<sup>2,3</sup> Dietary administration of N-nitroso sarcosine (0.25%) induces tumors in mice and administration via the drinking water at doses of 100 or 200 mg/kg induces tumors in rats.<sup>1</sup>

### References

1. IARC monographs on the evaluation of the carcinogenic risk of chemicals to humans: Some N-nitroso compounds. *World Health Organization, International Agency for Research on Cancer* (1978).
2. Herrmann, S., Duedahl-Olesen, L., and Granby, K. Occurrence of volatile and non-volatile N-nitrosamines in processed meat products and the role of heat treatment. *Food Control* **48**, 163-169 (2015).
3. Report on carcinogens, fourteenth edition. *National Toxicology Program, Department of Health and Human Services* (2016).

#### 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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