

## N-Nitrosodiethylamine

## Chemical Properties

CAS No. : 55-18-5

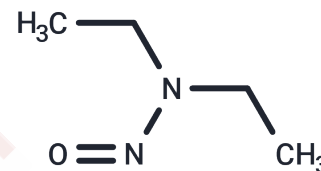
Formula: C<sub>4</sub>H<sub>10</sub>N<sub>2</sub>O

Molecular Weight: 102.14

Keep away from direct sunlight, Keep away from moisture

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	N-Nitrosodiethylamine (NDEA) is a carcinogenic dialkyl nitrosamine commonly found in water, tobacco smoke, cheddar cheese, pickled foods, fried foods, and various alcoholic beverages; it is associated with alterations in nucleases involved in DNA repair and replication, targets organs such as the nasal cavity, trachea, lungs, esophagus, and liver to induce tumors in animals, and is most commonly used to induce liver cancer models.
Targets(IC50)	DNA/RNA Synthesis
In vivo	Mice with N-Nitrosodiethylamine (25mg/kg) intraperitoneally resulted in fatty liver disease leading to progress of cancer disease.

## Solubility Information

Solubility	H <sub>2</sub> O: 98 mg/mL (959.47 mM), Sonication is recommended. DMSO: 50 mg/mL (489.52 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (19.58 mM), Sonication is recommended. PBS: 100 mg/mL (979.05 mM) <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	9.7905 mL	48.9524 mL	97.9048 mL
5 mM	1.9581 mL	9.7905 mL	19.581 mL
10 mM	0.979 mL	4.8952 mL	9.7905 mL
50 mM	0.1958 mL	0.979 mL	1.9581 mL

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Cahyani DM, Miatmoko A, Hariawan BS, Purwantari KE, Sari R. N-nitrosodiethylamine induces inflammation of liver in mice. *J Basic Clin Physiol Pharmacol*. 2021 Jun 25;32(4):505-510. doi: 10.1515/jbcpp-2020-0475. PMID: 34214328.

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