

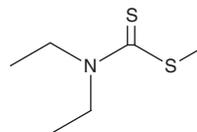
PRODUCT INFORMATION



Methyl Diethyldithiocarbamate

Item No. 34379

CAS Registry No.: 686-07-7
Formal Name: N,N-diethyl-carbamodithioic acid, methyl ester
Synonyms: DDTC-Me, Diethyldithiocarbamic Acid methyl ester, NSC 133269
MF: C₆H₁₃NS₂
FW: 163.3
Purity: ≥95%
Supplied as: An oil
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Methyl diethyldithiocarbamate is supplied as an oil. A stock solution may be made by dissolving the methyl diethyldithiocarbamate in the solvent of choice, which should be purged with an inert gas. Methyl diethyldithiocarbamate is slightly soluble in chloroform and methanol.

Description

Methyl diethyldithiocarbamate is an active metabolite of the aldehyde dehydrogenase inhibitor disulfiram (Item No. 15303).¹ It is produced by methylation of the disulfiram metabolite diethyldithiocarbamate in mouse liver microsomes.² Methyl diethyldithiocarbamate inhibits liver low K_m aldehyde dehydrogenase (ALDH) in rats (ID₅₀ = 15.5 mg/kg).¹ It decreases mean arterial pressure (MAP) and increases heart rate during ethanol challenge in rats when administered at a dose of 20.6 mg/kg.

References

1. Hart, B.W., Yourick, J.J., and Faiman, M.D. S-methyl-N,N-diethylthiolcarbamate: A disulfiram metabolite and potent rat liver mitochondrial low K_m aldehyde dehydrogenase inhibitor. *Alcohol* **7(2)**, 165-169 (1990).
2. Gessner, T. and Jakubowski, M. Diethyldithiocarbamic acid methyl ester. A metabolite of disulfiram. *Biochem. Pharmacol.* **21(2)**, 219-230 (1972).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/01/2022

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