



Product Information

Product ID D3374

CAS No. 97-77-8

Chemical Name Tetraethylthioperoxydicarbonic diamide

Synonym Tetraethylthiuram disulfide, Teturamin, TTD, Cronetal, Abstensil, Antadix, Antietanol, Exhoran, Antabuse, Etabus, Esperal, Tetradine, Noxal, Tetraetil

Formula C₁₀H₂₀N₂S₄

Formula Wt. 296.54

Melting Point 70°C

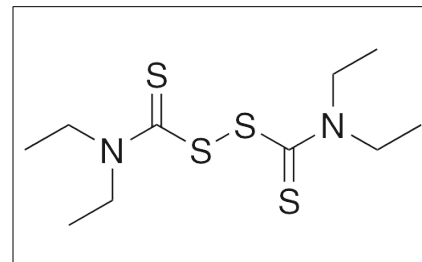
Purity ≥98%

Solubility Soluble in alcohol (330 mg/mL), ether, acetone, benzene, or chloroform. Practically insoluble in water.

Store Temp Ambient

Ship Temp Ambient

Description Disulfiram is an inhibitor of aldehyde dehydrogenase that is clinically used to treat chronic alcohol dependence. Disulfiram prevents complete metabolism of alcohol, allowing acetaldehyde to build up. Disulfiram also exhibits anticancer and anti-parasitic activities. This compound inhibits the 26S proteasome, activating caspases 3 and 7 and inducing apoptosis in chronic lymphocytic leukemia (CLL), non-small cell lung cancer (NSCLC), ovarian cancer, and breast cancer cells. Disulfiram also inhibits MGMT, potentially enhancing the efficacy of other co-administered chemotherapeutics. Additionally, disulfiram inhibits the growth of protozoans *Trichomonas* and *Tritrichomonas*. TEST!!!!!!



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
D3374	50 g	\$36.50
D3374	100 g	\$60.70
D3374	250 g	\$90.70

References Paranjpe A, Zhang R, Ali-Osman F, et al. Disulfiram is a direct and potent inhibitor of human O6-methylguanine-DNA methyltransferase (MGMT) in brain tumor cells and mouse brain and markedly increases the alkylating DNA damage. *Carcinogenesis*. 2014 Mar;35(3):692-702. PMID: 24193513.

Wickström M, Danielsson K, Rickardson L, et al. Pharmacological profiling of disulfiram using human tumor cell lines and human tumor cells from patients. *Biochem Pharmacol*. 2007 Jan 1;73(1):25-33. PMID: 17026967.

Bouma MJ, Snowden D, Fairlamb AH, et al. Activity of disulfiram (bis(diethylthiocarbamoyl)disulphide) and ditiocarb (diethyldithiocarbamate) against metronidazole-sensitive and -resistant *Trichomonas vaginalis* and *Tritrichomonas foetus*. *J Antimicrob Chemother*. 1998 Dec;42(6):817-20. PMID: 10052908.

Wright C, Moore RD. Disulfiram treatment of alcoholism. *Am J Med*. 1990 Jun;88(6):647-55. Review. Erratum in: *Am J Med* 1991 Oct;91(4):446. PMID: 2189310.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.