N-Nitrosodiisopropanolamine

Product Number  N 1768
Storage Temperature  2-8 °C

Product Description
Molecular Formula:  C₆H₁₄N₂O₃
Molecular Weight:  162.2
CAS Number:  53609-64-6
Boiling Point:  122-124 °C
Synonyms:  N-nitrosobis(2-hydroxypropyl)amine, N,N-di-(2-hydroxypropyl)nitrosamine, NDIPLA, di-isopropanolnitrosamine

N-Nitrosodiisopropanolamine (NDIPLA), the nitroso derivative of diisopropanolamine, is a member of the nitrosamine class of compounds, which have been investigated for their carcinogenic properties. In vivo activation of NDIPLA primarily occurs in the liver. DNA adducts that have been detected after treatment of cultured pancreatic ductal cells in vitro and hamsters and rats in vivo include methyl and hydroxypropyl adducts, such as N7-hydroxypropylguanine, N7-methylguanine, O₆-methylguanine, and O₆-hydroxypropylguanine.² ³

NDIPLA has been used to induce carcinoma in vivo in such organs as the pancreas and the thyroid.⁴ ⁵ ⁶ ⁷ ⁸ GC/MS procedures to analyze for the presence of NDIPLA in gel and chemical formulations have been published.⁹ ¹⁰

Precautions and Disclaimer
For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions
This product is miscible in DMSO (0.1 ml/ml, 10% [v/v]), yielding a clear, faint yellow to yellow solution.

References