# PRODUCT INFORMATION



## Dimenhydrinate

Item No. 39977

CAS Registry No.: 523-87-5

Formal Name: 8-chloro-3,7-dihydro-1,3-dimethyl-1H-

purine-2,6-dione with 2-(diphenylmethoxy)-

N,N-dimethylethanamine

Synonyms: Diphenhydramine 8-chlorotheophylline,

NSC 117855

MF:  $C_{24}H_{28}CIN_5O_3$ 

470.0 FW: **Purity:** ≥98% Supplied as: A solid -20°C Storage: Stability: ≥4 years

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

## **Laboratory Procedures**

Dimenhydrinate is supplied as a solid. A stock solution may be made by dissolving the dimenhydrinate in the solvent of choice, which should be purged with an inert gas. Dimenhydrinate is soluble in (≥10 mg/ml) in DMSO and sparingly soluble (1-10 mg/ml) in ethanol.

### Description

Dimenhydrinate is an antiemetic consisting of diphenhydramine (Item No. 11158), a histamine H<sub>1</sub> and muscarinic cholinergic receptor antagonist, and 8-chlorotheophylline, a derivative of the phosphodiesterase inhibitor and adenosine receptor antagonist theophylline (Item No. 23760).<sup>1</sup> Formulations containing dimenhydrinate have been used in the treatment of motion sickness.

### Reference

1. Sanger, G.J. and Andrews, P.L.R. A history of drug discovery for treatment of nausea and vomiting and the implications for future research. Front. Pharmacol. 9, 913 (2018).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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.

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, 03/28/2024

## **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