



SIGMA-ALDRICH

3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

Product Information

N-(1-Naphthyl)ethylenediamine dihydrochloride ACS Reagent

Product Number **N 5889**

Store at Room Temperature

22,248-8 is an exact replacement N 5889

Product Description

Molecular Formula: $C_{12}H_{14}N_2 \cdot 2HCl$

Molecular Weight : 259.2

CAS Number: 1465-25-4

Melting point: 188-190 °C¹

Synonym: NEED

This product is designated as ACS Reagent grade, and meets the specifications of the American Chemical Society (ACS) for reagent chemicals.

The use of this compound in a simple, colorimetric assay to demonstrate conditions for induction of nitrate reductase in plants has been reported.² Nitrite is released into the assay medium and converted to a bright magenta azo dye in a reaction with sulfanilamide (Product No. S 9251) and NEED. Calculations are based on a standard curve with absorbance readings at 540 nm.¹

This product is light-sensitive and will turn progressively darker with exposure. It is important to minimize light exposure and especially exposure to sunlight.

Precautions and Disclaimer

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

Preparation Instructions

This product is soluble in water (20 mg/ml), yielding a clear solution.³ This compound is reported to be readily soluble in 95% alcohol, dilute HCl, and hot water. It is slightly soluble in cold water, acetone, and absolute alcohol.¹

References

1. The Merck Index, 12th ed., Entry# 6496.
2. Harley, S. M., Use of a simple, colorimetric assay to demonstrate conditions for induction of nitrate reductase in plants. *Am. Biol. Teach*, **55**, 161-164 (1993).
3. Reagent Chemicals: American Chemical Society Specifications, 9th ed., p. 436 (2000).

HLD/RXR 3/03

Sigma brand products are sold through Sigma-Aldrich, Inc.

Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see reverse side of the invoice or packing slip.