

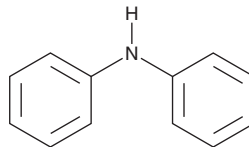
PRODUCT INFORMATION



Diphenylamine

Item No. 24250

CAS Registry No.: 122-39-4
Formal Name: N-phenyl-benzenamine
Synonym: NSC 215210
MF: C₁₂H₁₁N
FW: 169.2
Purity: ≥98%
UV/Vis.: λ_{max}: 284 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Diphenylamine is supplied as a solid. A stock solution may be made by dissolving the diphenylamine in the solvent of choice, which should be purged with an inert gas. Diphenylamine is slightly soluble in chloroform and methanol.

Description

Diphenylamine is an antioxidant and a pesticide.¹ It inhibits the oxidation of α-farnesene in solution as well as in the coating of Granny Smith apples postharvest. Diphenylamine (1,000 ppm) prevents superficial scald in several varieties of apples when applied by dipping or wrapping postharvest.² It is active against various benomyl-resistant or -sensitive isolates of the plant pathogenic fungus *P. expansum* (EC₅₀s = <2-12.8 and 22.9-78.5 μg/ml, respectively).³ Diphenylamine (0.25%) induces mortality in sheep keds (*M. ovinus*).⁴ It has been found as a contaminant in various jellies and jams and seawater.^{5,6} Formulations containing diphenylamine have been used in the control of fungi and insects in agriculture and in the preservation of postharvest apples from scald.

References

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2. Padfield, C.A.S. The use of diphenylamine and other chemicals to control superficial scald of apples. *N.Z. J. Agr. Res.* **2**(5), 953-970 (1959).
3. Rosenberger, D.A. and Meyer, F.W. Negatively Correlated Cross-Resistance to Diphenylamine in Benomyl-Resistant *Penicillium expansum*. *Phytopathology* **75**(1), 74-79 (1985).
4. Webb, J.E. and Green, R.A. On the penetration of insecticides through the insect cuticle. *J. Exp. Biol.* **22**, 8-20 (1945).
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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.

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