

PRODUCT INFORMATION



OPPD

Item No. 40732

CAS Registry No.: 15233-47-3

Formal Name: N¹-(1-methylheptyl)-N⁴-phenyl-1,4-benzenediamine

Synonyms: N-(1-Methylheptyl)-N'-phenyl-p-phenylenediamine, MHPPD, 4-(2-Octylamino)diphenylamine, 8-PPD

MF: C₂₀H₂₈N₂

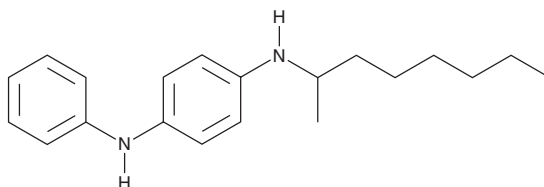
FW: 296.5

Purity: ≥98%

Supplied as: A neat liquid

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

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

Description

OPPD is an aromatic amine antioxidant.¹ It is toxic to *V. fischeri* (EC₅₀ = 0.68 mg/ml).² *In vivo*, OPPD induces skin sensitization and contact dermatitis in a local lymph node assay in mice.³ OPPD is commonly used as an additive in rubber.

References

1. Kawakami, T., Sakai, S., Obama, T., *et al.* Characterization of synthetic turf rubber granule infill in Japan: Rubber additives and related compounds. *Sci. Total Environ.* **840**:156716, (2022).
2. Wang, W., Chen, Y., Fang, J., *et al.* Toxicity of substituted p-phenylenediamine antioxidants and their derived novel quinones on aquatic bacterium: Acute effects and mechanistic insights. *J. Hazard. Mater.* **469**:133900, (2024).
3. Yamano, T. and Shimizu, M. Skin sensitization potency and cross-reactivity of p-phenylenediamine and its derivatives evaluated by non-radioactive murine local lymph node assay and guinea-pig maximization test. *Contact Dermatitis* **60**(4), 193-198 (2009).

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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