

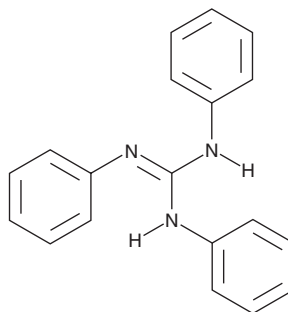
PRODUCT INFORMATION



TPG

Item No. 45200

CAS Registry No.: 101-01-9
Formal Name: N,N',N''-triphenyl-guanidine
Synonyms: NSC 4051, 1,2,3-Triphenylguanidine
MF: C₁₉H₁₇N₃
FW: 287.4
Purity: ≥95%
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

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

Description

TPG is a rubber vulcanization accelerator.¹ TPG is associated with increased urinary levels of the oxidative stress biomarkers 8-hydroxyguanosine (8-OHG; Item No. 89300) and dityrosine (di-Y; Item No. 27657).² TPG has been found in indoor dust and as a contaminant in soil.^{1,3}

References

1. Li, Z.-M. and Kannan, K. Occurrence of 1,3-diphenylguanidine, 1,3-di-o-tolylguanidine, and 1,2,3-triphenylguanidine in indoor dust from 11 countries: Implications for human exposure. *Environ. Sci. Technol.* **57**(15), 6129-6138 (2023).
2. Zhang, S., Zhou, Z., Wang, P., et al. Oxidative damage induced by daily exposure to primary and emerging aromatic amines: Insights from large scale biomonitoring and cell-based high-throughput PCR array analysis. *J. Hazard. Mater.* **496**, 139300 (2025).
3. Li, Z.M., Pal, V.K., Kannan, P., et al. 1,3-Diphenylguanidine, benzothiazole, benzotriazole, and their derivatives in soils collected from northeastern United States. *Sci. Total Environ.* **887**, 164110 (2023).

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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