

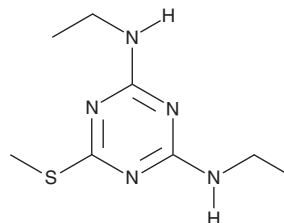
PRODUCT INFORMATION



Simetryn

Item No. 20392

CAS Registry No.: 1014-70-6
Formal Name: N²,N⁴-diethyl-6-(methylthio)-1,3,5-triazine-2,4-diamine
Synonym: NSC 163051
MF: C₈H₁₅N₅S
FW: 213.3
Purity: ≥98%
UV/Vis.: λ_{max}: 222 nm
Supplied as: A crystalline 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

Simetryn is supplied as a crystalline solid. A stock solution may be made by dissolving the simetryn in the solvent of choice, which should be purged with an inert gas. Simetryn is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of simetryn in these solvents is approximately 30 mg/ml.

Simetryn is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, simetryn should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Simetryn has a solubility of approximately 0.2 mg/ml in a 1:4 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Simetryn is a triazine herbicide that is primarily used to control broad-leaved weeds and grass in paddy rice and other crops.¹ It is absorbed through roots and foliage and inhibits photosynthesis.² Like other triazine herbicides, simetryn is characterized by high persistence and toxicity.^{1,3}

References

1. Rodríguez-González, N., Beceiro-González, E., González-Castro, M.J., *et al.* Application of a developed method for the extraction of triazines in surface waters and storage prior to analysis to seawaters of Galicia (northwest Spain). *Scientific WorldJournal* 536369 (2013).
2. Jiang, L., Yang, Y., Jia, L.X., *et al.* Biological responses of wheat (*Triticum aestivum*) plants to the herbicide simetryne in soils. *Ecotoxicol. Environ. Saf.* **127**, 87-94 (2016).
3. Saka, M. Acute toxicity of rice paddy herbicides simetryn, mefenacet, and thiobencarb to *Silurana tropicalis* tadpoles. *Ecotoxicol. Environ. Saf.* **73(6)**, 1165-1169 (2010).

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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