

Product Data Sheet

Product Name: Simazine-d10

Cat. No.: GC49425

Chemical Properties

Cas. No. 220621-39-6

SMILES [2H]C([2H])([2H])C([2H])([2H])NC1=NC(Cl)=NC(NC([2H])([2H])C([2H])([2H])[2H])=N1

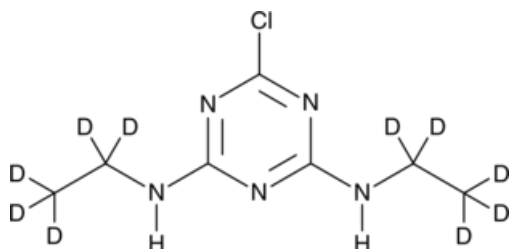
Formula C7H2ClD10N5 M.Wt 211.7

Solubility DMF: slightly soluble, DMSO: slightly soluble Storage -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

Simazine-d₁₀ is intended for use as an internal standard for the quantification of simazine by GC- or LC-MS. Simazine is a triazine herbicide.^{1,2,3} Pre-emergent application of simazine (1 kg/ha) controls annual and perennial monocot and dicot weeds and increases crop yield in sorghum crops.¹ It also controls weed emergence in kharif maize crops when applied at a concentration of 2 kg/ha.² Simazine (200 and 400 mg/kg) induces spleen cell apoptosis and reduces the proliferation of B and T cells in mice.³ Formulations containing simazine have been used in the control of broadleaf weeds and annual grasses in agriculture.

1. Patro, G.K., Tosh, G.C., and Nayak, B.C. Weed control in sorghum through cultural and chemical methods Indian J. Agric. Sci. 42(12)1128-1131 (1972) 2. Jadhav, S.N., and Khuspe, V.S. Relative

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

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efficacy of varying levels and times of application of simazine and atrazine on the control of weeds and yield of kharif maize (*Zea mays* Linn) J. Maharashtra Agric. Univ. 6(2)169-171(1981) 3. Ren, R., Sun, D.-J., Yan, H., et al. Oral exposure to the herbicide simazine induces mouse spleen immunotoxicity and immune cell apoptosis Toxicol. Pathol. 41(1)63-72(2013)

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