

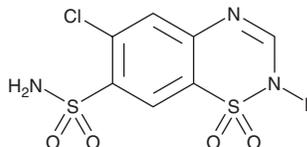
PRODUCT INFORMATION



Chlorothiazide

Item No. 17909

CAS Registry No.: 58-94-6
Formal Name: 6-chloro-2H-1,2,4-benzothiadiazine-7-sulfonamide, 1,1-dioxide
Synonyms: Diuril, NSC 25693
MF: C₇H₆ClN₃O₄S₂
FW: 295.7
Purity: ≥95%
UV/Vis.: λ_{max}: 226, 279 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

Chlorothiazide is supplied as a crystalline solid. A stock solution may be made by dissolving the chlorothiazide in the solvent of choice, which should be purged with an inert gas. Chlorothiazide is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of chlorothiazide in these solvents is approximately 20 and 30 mg/ml, respectively.

Chlorothiazide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, chlorothiazide should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Chlorothiazide has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Chlorothiazide is a first-in-class thiazide diuretic initially discovered from its ability to inhibit carbonic anhydrase *in vitro*.¹ As an antihypertensive agent, this thiazide increases renal excretion of sodium, potassium, chloride, and bicarbonate ions by inhibiting tubular reabsorptive mechanisms.¹

Reference

1. Laragh, J.H. The mode of action and use of chlorothiazide and related compounds. *Circulation* **26**, 121-132 (1962).

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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