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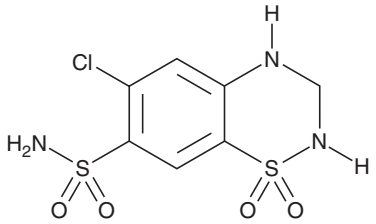
PRODUCT INFORMATION

Hydrochlorothiazide

Item No. 21304

CAS Registry No.: 58-93-5
Formal Name: 6-chloro-3,4-dihydro-2H-1,2,4-benzothiadiazine-7-sulfonamide, 1,1-dioxide
Synonyms: HCTZ, NSC 53477, SU 5879
MF: $C_7H_8ClN_3O_4S_2$
FW: 297.7
Purity: ≥98%
UV/Vis.: λ_{max}: 226, 270, 315 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

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

HCTZ is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, HCTZ should first be dissolved in DMF and then diluted with the aqueous buffer of choice. HCTZ 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

HCTZ is a thiazide diuretic that inhibits the apical membrane sodium chloride cotransporter in the distal and collecting duct nephron segments.[1-3] Diuretics, including HCTZ, have been abused as performance-enhancing drugs and masking agents in sports doping.[4,5]

References

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