PRODUCT INFORMATION



Hydrochlorothiazide Impurity C

Item No. 22384

CAS Registry No.: 402824-96-8

Formal Name: N-[[7-(aminosulfonyl)-6-chloro-

> 2,3-dihydro-1,1-dioxido-4H-1,2,4benzothiadiazin-4-yl]methyl]-6-chloro-3,4-dihydro-2H-1,2,4-benzothiadiazine-

7-sulfonamide, 1,1-dioxide

MF: $C_{15}H_{16}CI_2N_6O_8S_4$

FW: 607.5 **Purity:** ≥90% Supplied as: A solid -20°C Storage: Stability: ≥4 years

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

Laboratory Procedures

Hydrochlorothiazide impurity C is supplied as a solid. A stock solution may be made by dissolving the hydrochlorothiazide impurity C in the solvent of choice, which should be purged with an inert gas. Hydrochlorothiazide impurity C is soluble in the organic solvent DMSO.

Description

Hydrochlorothiazide impurity C is a potential impurity found in commercial hydrochlorothiazide preparations. Hydrochlorothiazide (Item No. 21304) is a thiazide diuretic that inhibits the apical membrane sodium chloride cotransporter in the distal and collecting duct nephron segments.²⁻⁴

References

- 1. Fang, X., Bibart, R.T., Mayr, S., et al. Purification and identification of an impurity in bulk hydrochlorothiazide. J. Pharm. Sci. 90(11), 1800-1809 (2001).
- 2. Odlind, B. and Lönnerholm, G. Renal tubular secretion and effects of chlorothiazide, hydrochlorothiazide and clopamide: A study in the avian kidney. Acta. Pharmacol. Toxicol. (Copenh) 51(3), 187-197 (1982).
- 3. Majid, D.S.A. and Navar, L.G. Blockade of distal nephron sodium transport attenuates pressure natriuresis in dogs. Hypertension 23(6 Pt 2), 1040-1045 (1994).
- 4. Vongpatanasin, W. Hydrochlorothiazide (HCTZ) is not the most useful nor versatile thiazide diuretic. Curr. Opin. Cardiol. 30(4), 361-365 (2015).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM