# PRODUCT INFORMATION



## Hydroflumethiazide

Item No. 23612

CAS Registry No.: 135-09-1

Formal Name: 3,4-dihydro-6-(trifluoromethyl)-2H-1,2,4-

benzothiadiazine-7-sulfonamide, 1,1-dioxide

Synonym: NSC 44627

MF:  $C_8H_8F_3N_3O_4S_2$ 

FW: 331.3 ≥98% **Purity:** Supplied as: A solid 4°C Storage: Stability:

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

### **Laboratory Procedures**

Hydroflumethiazide is supplied as a solid. A stock solution may be made by dissolving the hydroflumethiazide in the solvent of choice. Hydroflumethiazide is slightly soluble methanol and DMSO.

#### Description

Hydroflumethiazide is a thiazide diuretic that also inhibits carbonic anhydrase (CA).<sup>1</sup> It is selective for CAII, VB, VII, IX, XII, and XIV (Kis = 305-235 nM) over CAI, IV, and VI (Kis = 2,840-8,250 nM) and CAIII, VA, and XIII (K.s = >10 μM). Diuretics of the thiazide class, of which hydroflumethiazide is a member, inhibit the renal Na<sup>+</sup>/Cl<sup>-</sup> cotransporter.<sup>2</sup> Formulations containing hydroflumethiazide have been used as diuretics.

#### References

- 1. Temperini, C., Cecchi, A., Scozzafava, A., et al. Carbonic anhydrase inhibitors. Interaction of indapamide and related diuretics with 12 mammalian isozymes and X-ray crystallographic studies for the indapamide-isozyme II adduct. Bioorg. Med. Chem. Lett. 18(8), 2567-2573 (2008).
- 2. Hughes, A.D. How do thiazide and thiazide-like diuretics lower blood pressure? J. Renin Angiotensin Aldosterone Syst. 5(4), 155-160 (2004).

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.

## WARRANTY AND LIMITATION OF REMEDY

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information Buyer agrees to purchase the material can be found on our website.

Copyright Cayman Chemical Company, 12/19/2022

### **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