

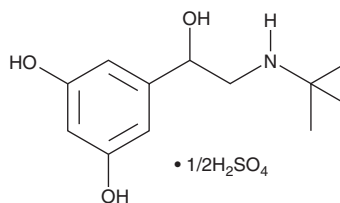
# PRODUCT INFORMATION



## Terbutaline (hemisulfate)

Item No. 21292

**CAS Registry No.:** 23031-32-5  
**Formal Name:** 5-[2-[(1,1-dimethylethyl)amino]-1-hydroxyethyl]-1,3-benzenediol, hemisulfate  
**MF:** C<sub>12</sub>H<sub>19</sub>NO<sub>3</sub> • 1/2H<sub>2</sub>SO<sub>4</sub>  
**FW:** 274.3  
**Purity:** ≥98%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥5 years



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

### Description

Terbutaline (hemisulfate) (Item No. 21292) is an analytical reference standard categorized as a  $\beta_2$ -adrenergic receptor agonist.<sup>1</sup> Terbutaline has been used to enhance physical performance in athletes.<sup>2</sup> This product is intended for use in analytical forensic applications. This product is also available as a general research tool (Item No. 29337).

### References

1. Hoffmann, C., Leitz, M.R., Oberdorf-Maass, S., *et al.* Comparative pharmacology of human  $\beta$ -adrenergic receptor subtypes - characterization of stably transfected receptors in CHO cells. *Naunyn Schmiedebergs Arch. Pharmacol.* **369(2)**, 151-159 (2004).
2. Jacobson, G.A. and Hostrup, M. Terbutaline: Level the playing field for inhaled  $\beta_2$ -agonists by introducing a dosing and urine threshold. *Br. J. Sports Med.* **51(18)**, 1323-1324 (2017).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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

Copyright Cayman Chemical Company, 06/28/2023

#### 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