

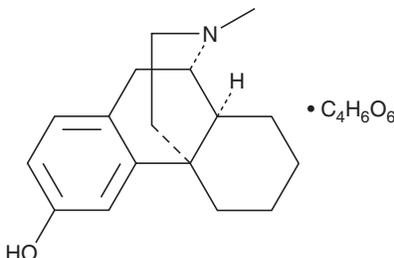
# PRODUCT INFORMATION



## Dextrorphan (tartrate)

Item No. 15886

**CAS Registry No.:** 143-98-6  
**Formal Name:** (9 $\alpha$ ,13 $\alpha$ ,14 $\alpha$ )-17-methyl-morphinan-3-ol  
2R,3R-dihydroxybutanedioate  
**Synonyms:** DXO, d-3-hydroxy-N-Methylmorphinan,  
NIH 4591  
**MF:** C<sub>17</sub>H<sub>23</sub>NO • C<sub>4</sub>H<sub>6</sub>O<sub>6</sub>  
**FW:** 407.5  
**Purity:**  $\geq$ 98%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 4 years



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

### Description

Dextrorphan (tartrate) (Item No. 15886) is an analytical reference material categorized as a morphinan.<sup>1</sup> Dextrorphan is an active metabolite of dextromethorphan (Item Nos. ISO60141 | 11157 | 13950).<sup>2</sup> It has analgesic activity and induces memory impairments in rats and has anticonvulsant activity and induces hyperlocomotion in mice.<sup>1,3,4</sup> Dextrorphan substitutes for phencyclidine (PCP; Item Nos. ISO60194 | 14276) in rhesus monkeys.<sup>5</sup> This product is intended for research and forensic applications.

### References

1. Chen, Y.W., Chu, K.S., Lin, C.N., *et al.* Dextromethorphan or dextrorphan have a local anesthetic effect on infiltrative cutaneous analgesia in rats. *Anesth. Analg.* **104(5)**, 1251-1255 (2007).
2. Shin, E.J., Lee, P.H., Kim, H.J., *et al.* Neuropsychotoxicity of abused drugs: Potential of dextromethorphan and novel neuroprotective analogs of dextromethorphan with improved safety profiles in terms of abuse and neuroprotective effects. *J. Pharmacol. Sci.* **106(1)**, 22-27 (2008).
3. Dematteis, M., Lallement, G., and Mallaret, M. Dextromethorphan and dextrorphan in rats: Common antitussives - different behavioural profiles. *Fundam. Clin. Pharmacol.* **12(5)**, 526-537 (1998).
4. Cho, Y.-C., Liao, J.-F., Chang, W.-Y., *et al.* Binding of dimemorfan to sigma-1 receptor and its anticonvulsant and locomotor effects in mice, compared with dextromethorphan and dextrorphan. *Brain Res.* **821(2)**, 516-519 (1999).
5. Nicholson, K.L., Hayes, B.A., and Balster, R.L. Evaluation of the reinforcing properties and phencyclidine-like discriminative stimulus effects of dextromethorphan and dextrorphan in rats and rhesus monkeys. *Psychopharmacology (Berl)* **146(1)**, 49-59 (1999).

#### 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

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