# PRODUCT INFORMATION



# Isotonitazene

Item No. 27255

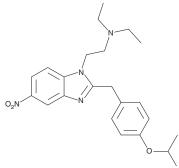
CAS Registry No.: 14188-81-9

Formal Name: N,N-diethyl-2-[[4-(1-methylethoxy)

> phenyl]methyl]-5-nitro-1Hbenzimidazole-1-ethanamine

MF:  $C_{23}H_{30}N_4O_3$ 410.5 FW: ≥98% **Purity:** Supplied as: A neat solid Storage: -20°C Stability: ≥1 year

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



### Description

Isotonitazene (Item No. 27255) is an analytical reference material categorized as an opioid. 1-3 Isotonitazene has analgesic effects in mice.<sup>4</sup> It has been associated with overdoses.<sup>5</sup> Isotonitazene is regulated as a Schedule I compound in the United States. This product is intended for research and forensic applications.

This product is qualified as a Reference Material that has been manufactured and tested to ISO/IEC 17025 and ISO 17034 international standards.

### References

- 1. Casy, A.F. and Wright, J. Ionisation constants and partition coefficients of some analgesically active 2-benzylbenzimidazole derivatives and related compounds. J. Pharm. Pharmacol. 18(10), 677-683 (1966).
- 2. Blanckaert, P., Cannaert, A., Van Uytfanghe, K., et al. Report on a novel emerging class of highly potent benzimidazole NPS opioids: Chemical and in vitro functional characterization of isotonitazene. Drug Test Anal. 12(4), 422-430 (2019).
- 3. Vandeputte, M.M., Van Uytfanghe, K., Layle, N.K., et al. Synthesis, chemical characterization, and μ-opioid receptor activity assessment of the emerging group of "nitazene" 2-benzylbenzimidazole synthetic opioids. ACS Chem. Neurosci. 12(7), 1241-1251 (2021).
- 4. Ujváry, I., Christie, R., Evans-Brown, M., et al. DARK classics in chemical neuroscience: Etonitazene and related benzimidazoles. ACS Chem. Neurosci. 12(7), 1072-1092 (2021).
- 5. Shover, C.L., Falasinnu, T.O., Freedman, R.B., et al. Emerging characteristics of isotonitazene-involved overdose deaths: A case-control study. J. Addict. Med. 15(5), 429-431 (2021).

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

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.

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