# PRODUCT INFORMATION



Lorazepam-13C2-d4 Item No. 17965

CAS Registry No.: 2747915-04-2

Formal Name: 7-chloro-5-(2-chlorophenyl-d<sub>4</sub>)-3-

hydroxy-1,3-dihydro-2H-benzo[e][1,4]

diazepin-2-one-2,3-13C<sub>2</sub>

MF: C<sub>13</sub>[<sup>13</sup>C]<sub>2</sub>H<sub>6</sub>D<sub>4</sub>Cl<sub>2</sub>N<sub>2</sub>O<sub>2</sub>

327.2 FW: ≥98% **Purity:** Supplied as: A neat solid Storage: -20°C Stability: ≥2 years

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

### Description

Lorazepam- $^{13}$ C $_2$ -d $_4$  (Item No. 17965) is an analytical reference material intended for use as an internal standard for the quantification of lorazepam (Item Nos. ISO60202 | 15891) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Lorazepam is categorized as a benzodiazepine that has anxiolytic properties. 1,2 It is a metabolite of diclazepam (Item Nos. 28623 | 15554).<sup>2</sup> Formulations containing lorazepam have been used in the treatment of anxiety. Lorazepam-<sup>13</sup>C<sub>2</sub>-d<sub>4</sub> is regulated as a Schedule IV 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 for reference materials.

## References

- 1. Baldwin, D., Woods, R., Lawson, R., et al. Efficacy of drug treatments for generalised anxiety disorder: Systematic review and meta-analysis. BMJ 342, d1199 (2011).
- 2. Moosmann, B., Bisel, P., and Auwärter, V. Characterization of the designer benzodiazepine diclazepam and preliminary data on its metabolism and pharmacokinetics. Drug Test Anal. 6(7-8), 757-763 (2014).

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

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