



CERTIFICATE OF ANALYSIS

20 Martin Ross Avenue, North York, ON, M3J 2K8, CANADA
Tel: (416) 665-9696, Fax: (416) 665-4439
Email: orders.trc@lgcgroup.com Website: www.trc-canada.com

1. Identification

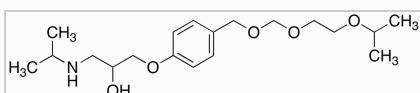
Catalogue Number: D290130

CAS Number: 1215342-36-1

Product: rac Des(isopropoxyethyl)-2-isopropoxyethoxymethyl Bisoprolol

Synonym: 1-[4-[[[2-Isopropoxyethoxy)methoxy]methyl]phenoxy]-3-isopropylamino-2-propanol; Bisoprolol EP Impurity G

Structure:



Molecular Formula:

C₁₉H₃₃NO₅

Molecular weight:

355.47

Source of Product:

Synthetic

Solubility:

DMSO (Slightly), Methanol (Slightly)

Lot Number: 3-AVS-11-1

Purity: 96%

Shipping Condition: This Product Is Stable To Be Shipped At Room Temperature

Storage Condition: 4°C

2. Warning

Warning 1:

Warning 2:

Warning 3:

3. Analytical Information

Tests:	Specifications:	Results:
Appearance	Colourless to Beige Oil	Pale Beige Oil
NMR	Conforms to Structure	Conforms
HPLC Purity	Report Result	97.21% (225 nm)
MS	Conforms to Structure	Conforms

Additional Information: N/A

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of $\pm 2\%$. Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

4. Signatures

Reviewed By	Reviewed By	C of A Approved By	Test Date	Retest Date
Henry Tieu	Toni Rantanen	Christina Gouliaras	7/14/2023	7/12/2027