



MP Biomedicals, LLC

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Certificate of Analysis

Product Description: N-alpha-Benzoyl-L-arginine p-Nitroanilide Hydrochloride_
Catalog Number: 154829_
Lot: S2532_

Formula: C₁₉H₂₂N₆O₄·HCl

CAS #: 21653-40-7

Physical Description: White to Off-White Powder

Formula Weight: 434.9

Storage: -20°C

Test	Specification	Result
Identity Test	Passes	Passes
FTIR	Conforms to Standard	Conforms to Standard
Melting Point	219 - 229°C	223.9 - 225.3°C
Optical Rotation	Report Result	+14.1° (1% in methanol)

Purity (TLC): >99%

Related Impurities (TLC): <0.1% pNA (p-Nitroaniline)

TLC Conditions:

- n-butanol/acetic acid/H₂O: 4/2/2
- ethylacetate/pyridine/acetic acid/H₂O: 60/20/6/11
- chloroform/methanol/acetic acid 32%: 5/3/1
- plate: silicagel 60 F254
- detected by : UV, ninhydrin, TMB

Enantiomer Content (GC): 0.10% D-enantiomer

Assay (elemental analysis): 100.1%

- Nth: 19.32%

- Nfd: 19.34%

Water Content (KF): 0.2%

Chloride Content: 8.4%

Appearance of solution (50mg/ml in methanol): Clear, slightly yellow solution

Recommended Retest Date (MM/DD/YYYY): 10/22/2022

09/16/2019 - John Huang, PhD

MP Biomedicals, LLC.

Quality Control Manager

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Online Ordering, MSDSs, certificates of analysis and data sheets now available on our web site

Technical Service: 1-800-279-5490 (440-337-1200) Customer Service: 1-800-854-0530 (440-337-1200)