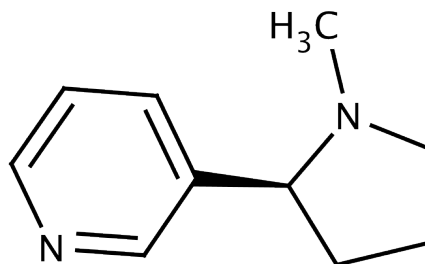


## Product Specification

Product Name	S-(-)-Nicotine
Glentham Code	GK9991
CAS Number	54-11-5
EINECS	200-193-3
MDL Number	MFCD00006369
PubChem SID	310277761
Molecular Weight	162.24
Molecular Formula	C10H14N2
Storage Temp.	+4°C



Property	Specification
Physical Description	Colourless or brownish viscous liquid
Assay	99.0 - 101.0 % (anhydrous)
Solubility	Soluble in water, miscible with anhydrous ethanol
Appearance of Solution	1g/10ml in water, Colour: < Y5, BY5 or R5
Specific Optical Rotation	-140 - -152 ° (1g/50ml in ethanol)
Water	≤ 0.5%
Identification	IR UV
Ethanol	≤ 0.5%
Hexane	≤ 0.03%
Heavy Metals	≤ 10ppm
Sulphated Ash	≤ 0.1%
Impurities	Nicotine-trans-N-oxide: ≤ 0.2% Nicotine-cis-N-oxide: ≤ 0.2% Myosmine: ≤ 0.5% Continine: ≤ 0.2% beta-Nicotyrine: ≤ 0.2% Nornicotine: ≤ 0.5% Anabasine: ≤ 0.3% Anatabine: ≤ 0.3% Total Nicotine-N-oxides: ≤ 0.3%
Any Unspecified Impurity	≤ 0.1%
Total Impurities	≤ 1.0%
Pharmacopoeia Specification(s)	EP

Specification Version	-	v1.0
Date Created	-	2013-07-02

## Product Specification

Glenthams Life Sciences confirm that the above referenced product conformed to the information displayed in this document on the quality release date. Please check [www.glenthams.com](http://www.glenthams.com) or contact us using the details above for the current version of this document.

This document was generated electronically and is therefore valid without signature. © Glenthams Life Sciences Ltd, 2021