

## Product Datasheet

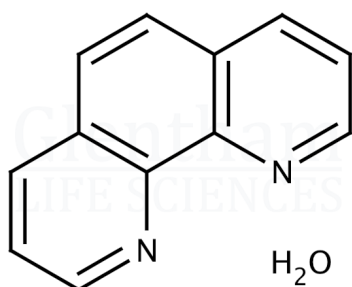
### GE7007 - 1,10-Phenanthroline monohydrate

#### Product Details

Product Name	1,10-Phenanthroline monohydrate
Glenthams Code	GE7007
CAS Number	5144-89-8
EINECS	200-629-2
MDL Number	MFCD00149973
PubChem SID	310278693
Additional CAS	66-71-7 (anhydrous)
Related Categories	Biochemicals, Analytical Reagents

#### Structure

Molecular Weight	: 198.23
Molecular Formula	: $C_{12}H_8N_2 \cdot H_2O$




#### Storage

Recommended storage temperature: +20°C.

#### Hazards and Transport

CLP Classification	Aquatic Chronic 1, Acute Tox. 3, Aquatic Acute 1
Signal Word	Danger

Hazard Codes	H410, H301, H400
Precautionary Codes	P273, P264, P270
Pictograms	

UN Number, Class, PG (RID)	UN2811 - 6.1 - PG III
----------------------------	-----------------------

#### Glenthams Product Specification

Physical Description	: White to almost white crystalline powder or crystals
Identification (IR)	: To conform to standard
Solubility (10% in ethanol)	: Clear to faintly turbid, colourless to faint yellow solution
Melting Point	: 98.0 - 104.0 °C (clear melt)
Water	: 8.5 - 10.5 %
Assay (Titration)	: ≥ 99.0%
Version	: v1.2

#### About 1,10-Phenanthroline monohydrate

Heterocyclic organic compound found as white to off-white crystals. Soluble in organic solvents, it forms strong complexes with most metal ions. Inhibitor of metalloproteinases (mainly zinc). Phenanthroline is used in titrations to detect alkyl lithium reagents. Monohydrochloride salt as a monohydrate, and base hydrate form also available.

This document was generated electronically and is therefore valid without signature. © Glenthams Life Sciences Ltd, 2025