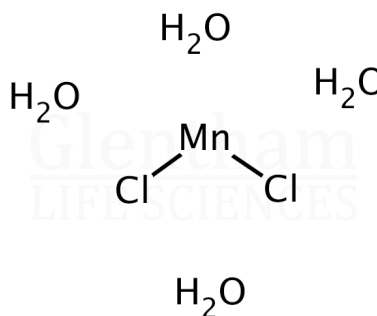


## Certificate of Analysis

Product Name	Manganese(II) chloride tetrahydrate
Glentham Code	GK2508
CAS Number	13446-34-9
EINECS	231-869-6
MDL Number	MFCD00149792
PubChem SID	310276013
Batch Number	319HYL

Molecular Weight	197.90
Molecular Formula	$\text{MnCl}_2 \cdot 4\text{H}_2\text{O}$
Storage Temp.	+20°C



Property	Specification	Batch 319HYL
Physical Description	Pink crystals or crystalline powder	Pink crystalline powder
Solubility (5% in water)	Clear, pale pink solution	Conforms
Iron (Fe)	$\leq 100\text{ppm}$	$\leq 1\text{ppm}$
Zinc (Zn)	$\leq 100\text{ppm}$	2.5ppm
Sodium (Na)	$\leq 100\text{ppm}$	$\leq 1\text{ppm}$
Sulphate (SO4)	$\leq 0.2\%$	Conforms
Assay	$\geq 98.0\%$ ( $\text{MnCl}_2 \cdot 4\text{H}_2\text{O}$ )	99.1%

Specification Version	v1.0
Manufacture Date	2024-04-10
Re-Test Date	2036-04-05

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

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