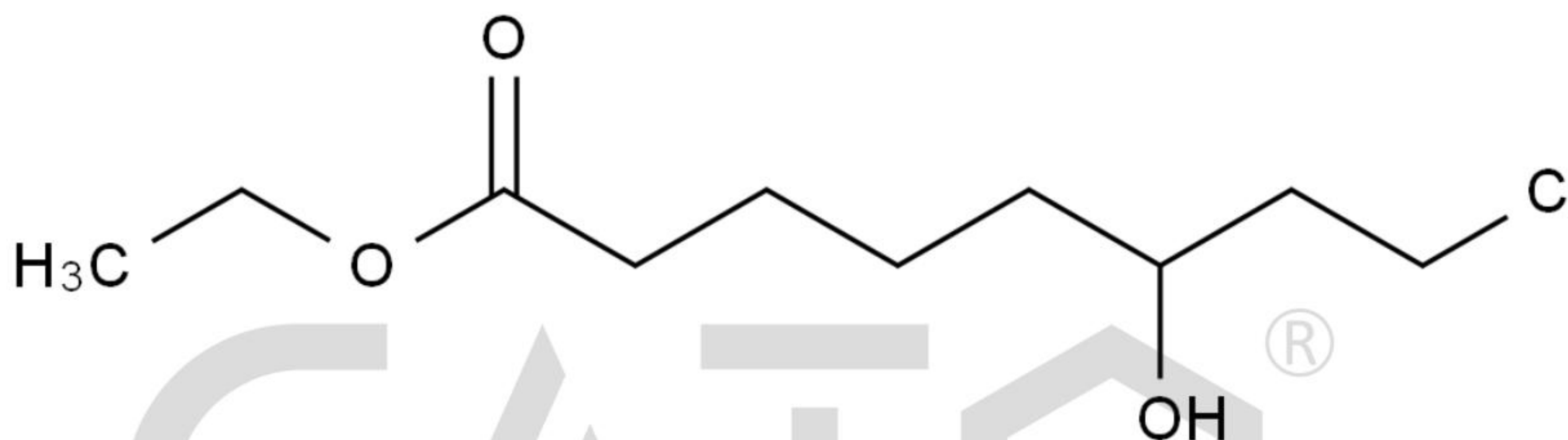


Certificate of Analysis

Reference Material & Standard

Product Name:	Thioctic Acid Impurity 8	Catalogue Number:	C4X-15188
Synonyms:	N/A	Lot Number:	0729-RF-0040
CAS Number:	1070-65-1	Expiry Date:	May 23, 2027
Molecular Formula:	C ₁₀ H ₁₉ ClO ₃	Storage:	-20°C±5°C Protected from light and Sealed
Molecular Weight:	222.71		

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Colourless Liquid
Identification	LCMS&HNMR	Confirmed
Purity	HPLC	99.8684%
Water Content	Karl Fischer	0.917%
Residual Solvents	NMR	Not detected in NMR
Assay		99.0%

Comment:

The calculation of the 100% method follows the formula (calculated on the non-dried basis):

Assay (%) = (100% - Water Content - Residual Solvents) * Purity HPLC (%) / 100%

Water Content and Residual Solvents are considered as absolute effect, HPLC purity is considered as relative effect.

Signature:

Prepared by:

Lily

Reviewed by:

Hinlam

Approved by General Manager:

David

Date: Jul 29, 2024

Date: Jul 29, 2024

Date: Jul 29, 2024

