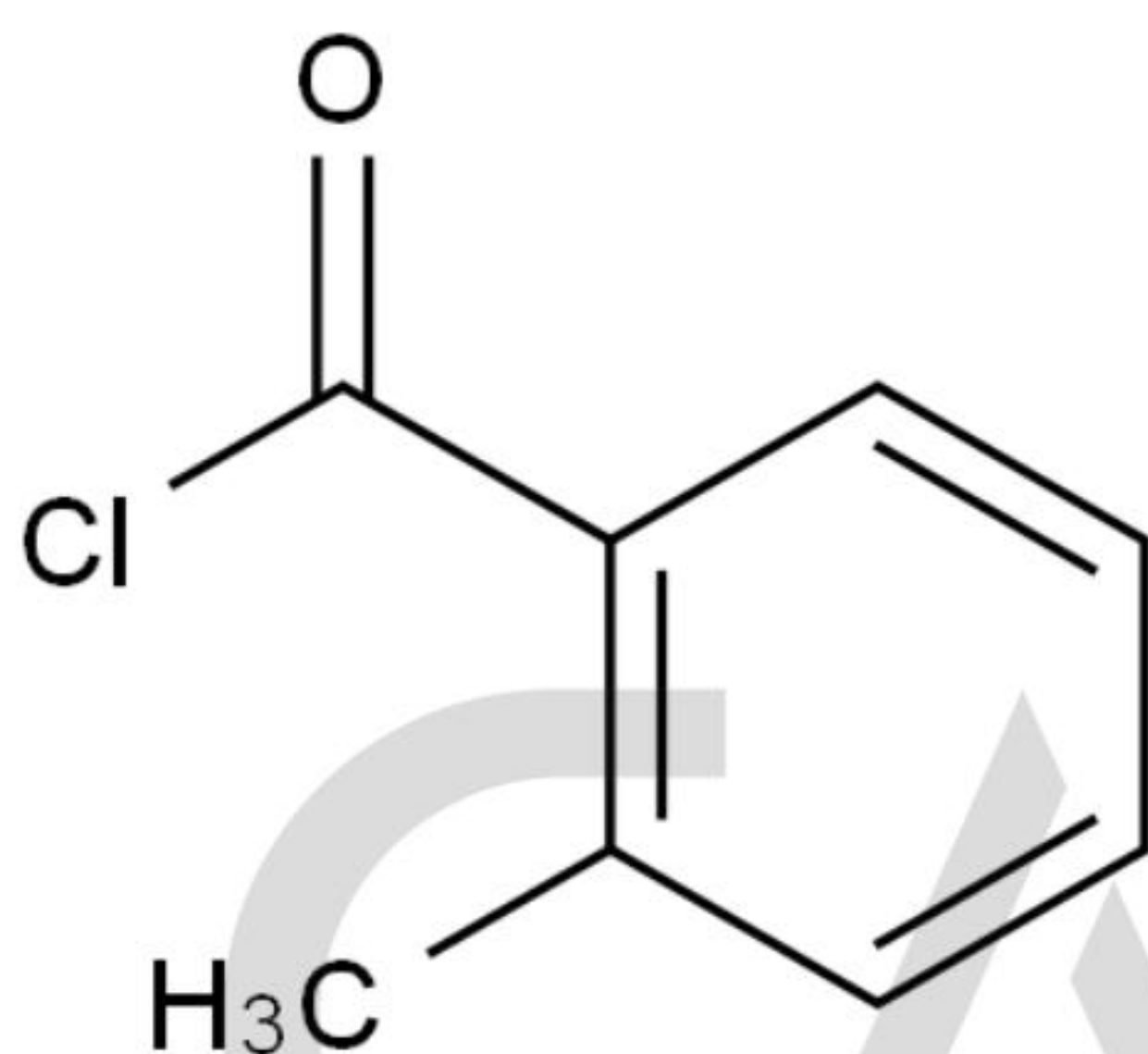


Certificate of Analysis

Reference Material & Standard

Product Name:	Tolvaptan Impurity 19	Catalogue Number:	C4X-195519
Synonyms:	N/A	Lot Number:	0512-RE-0018
CAS Number:	933-88-0	Expiry Date:	May 16, 2026
Molecular Formula:	C ₈ H ₇ ClO	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	154.59		

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Colourless Liquid
Identification	GCMS&HNMR	Confirmed
Purity	GC	96.301%
Water Content	Karl Fischer	0.1856%
Assay		96.1%

Comment:

- Catalogue Number has been changed from "CCHM704722" to "C4X-195519". Therefore some of the graphs shown below were named by "CCHM704722".
- The calculation of the 100% method follows the formula (calculated on the non-dried basis):

$$\text{Assay (\%)} = (100\% - \text{Water Content}) * \text{Purity GC (\%)} / 100\%$$
 Water Content is considered as absolute effect, GC purity is considered as relative effect.

Signature:

Prepared by:

Koi

Reviewed by:

Lisa

Approved by General Manager:

David

Date: Oct 15, 2024

Date: Oct 15, 2024

Date: Oct 15, 2024

