

Certificate of Analysis

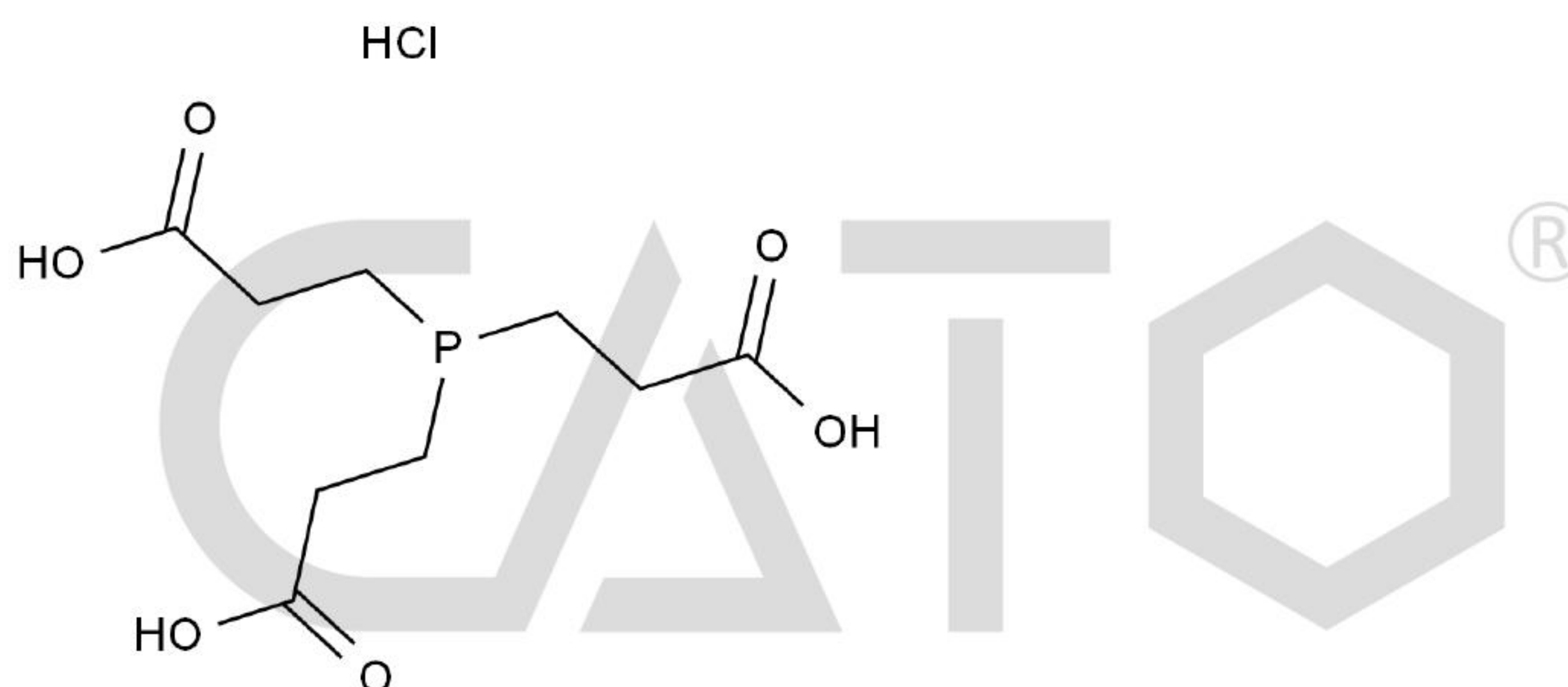
Reference Material & Standard

Product Name:	Tris(2-carboxyethyl)phosphine Hydrochloride	Catalogue Number:	CCAD300515
Synonyms:	N/A	Lot Number:	0317-RH-0098
CAS Number:	51805-45-9	Expiry Date:	Mar 25, 2030
Molecular Formula:	C ₉ H ₁₅ O ₆ P HCl	Storage:	-20°C±5°C Protected from light and Sealed
Molecular Weight:	250.19 36.46	Shipping Condition:	Shipping with Ice Packs

Warning:



Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White Solid
Identification	LCMS&HNMR	Confirmed
Purity	ELSD	94.5%
Assay	qNMR	94.4%
Uncertainty		±1.1%

Comment:

The uncertainty values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Signature:

Prepared by:

Nice

Reviewed by:

Lisa

Approved by General Manager:

David

Date: Mar 26, 2026

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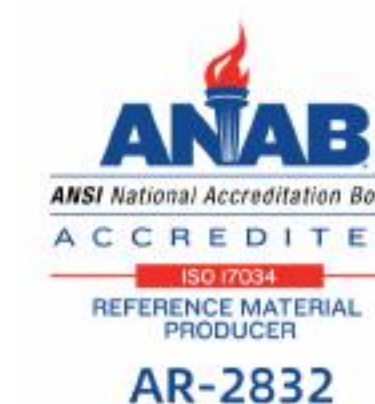
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