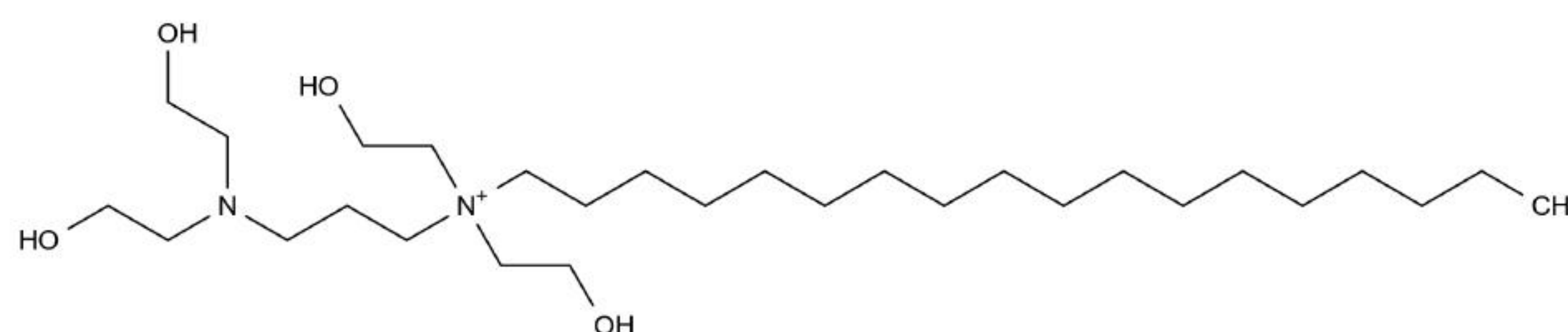


Certificate of Analysis

Reference Material & Standard

Product Name:	N-(3-(bis(2-hydroxyethyl)amino)propyl)-N,N-bis(2-hydroxyethyl)octadecan-1-aminium	Catalogue Number:	CPS-2504001
Synonyms:	N/A	Lot Number:	0609-RG-0129
CAS Number:	N/A	Expiry Date:	Jun 15, 2028
Molecular Formula:	C ₂₉ H ₆₃ N ₂ O ₄ ⁺	Storage:	-20°C±5°C Protected from light and Sealed
Molecular Weight:	503.82	Shipping Condition:	Shipping with Ice Packs

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Yellow Sticky Solid
Identification	HRMS&IR&CNMR&DEPT&1H-1H COSY&HSQC&HMBC&HNMR	Confirmed
Purity	ELSD	98.519%
Loss on Drying	TGA	2.6609%
Assay		95.9%

Comment:

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

Assay (%) = (100% - Loss on Drying) * Purity ELSD (%) / 100%

Loss on Drying is considered as absolute effect, ELSD purity is considered as relative effect.

Signature:

Prepared by:

Yuki

Reviewed by:

Hin Lam

Approved by General Manager:

David

Date: Jun 16, 2025

Date: Jun 16, 2025

Date: Jun 16, 2025



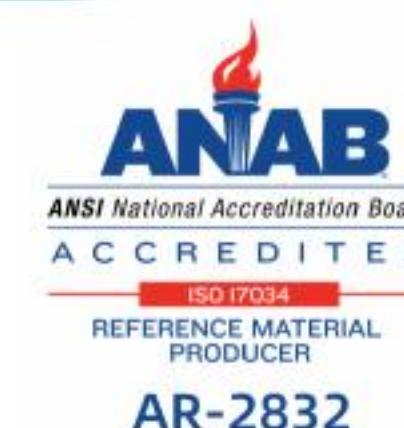
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