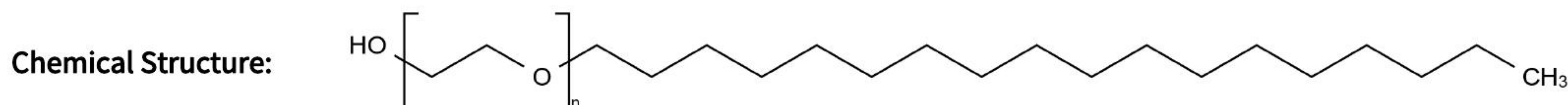


Certificate of Analysis

Intermediate Material

Product Name:	Polyoxyethylene (n~2) stearyl ether	Catalogue Number:	CIM-100631
Batch Size:	N/A	Lot Number:	1127-RE-0119
CAS Number:	9005-00-9	Production Date:	Nov 24, 2023
Molecular Formula:	(C ₂ H ₄ O) _n C ₁₈ H ₃₈ O	Expiry Date:	Nov 26, 2025
Molecular Weight:	358.34	Storage:	2°C ~ 8°C Protected from light and Sealed



Test Items	Acceptance Criteria	Results
Appearance	White Waxy Solid	White Waxy Solid
Acid Value(mg KOH/g)	0-1mg KOH/g	0.5mg KOH/g
HLB Value	4.7-5.1	4.8
Hydroxyl Value(mg KOH/g)	150-165mg KOH/g	155mg KOH/g
Melting Point(°C)	44-46°C	44.2°C
Water By Karl Fischer	0-1%	0.321%
Infrared Spectrum		Conforms to Structure

CATO Research Chemicals Inc.

NOTE: This product is low melting point solid, may change state in different environments (solid, liquid or semi-solid).

Signature:

Prepared by:

Lily

Reviewed by:

Hin Lam

Approved by General manager:

David

Date: Nov 27, 2023

Date: Nov 27, 2023

Date: Nov 27, 2023

