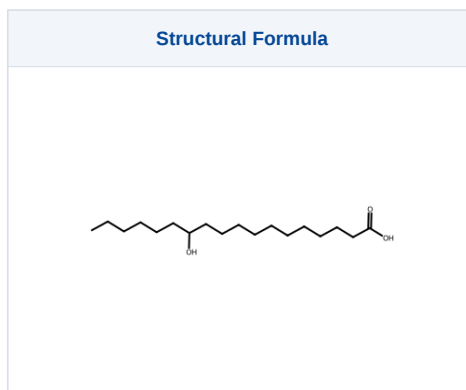


CERTIFICATE OF ANALYSIS

Standard product specification — applicable to all consignments of this product and grade supplied by Scapex Exports Pvt. Ltd., manufacturer and supplier of quality chemicals.

Product Name	12-Hydroxystearic Acid
C.A.S. Number	106-14-9
Molecular Formula	C ₁₈ H ₃₆ O ₃
Molecular Weight	300.48
Grade / Standard	99% min
Physical Form	White waxy powder
Product Category	Surfactants & Oleochemicals
Country of Origin	India



ANALYTICAL RESULTS

S. No.	Test Parameter	Specification	Result	Method
1	Description	White waxy powder	Complies	Visual
2	Identification	Conforms to the structure of the substance	Complies	FTIR / Chemical test
3	Solubility	As per specification	Complies	Visual / Monograph
4	Assay	Not less than 99.0 % w/w	99.36	Titrimetry (Epton / two-phase)
5	pH (1 % aqueous solution)	7.0 – 10.0	8.7	Potentiometry
6	Free Alkali	Not more than 0.5 % w/w	0.101	Titrimetry
7	Matter Insoluble in Alcohol	Not more than 2.0 % w/w	0.91	Gravimetry
8	Moisture	Not more than 1.0 % w/w	0.12	Karl Fischer / Gravimetry
9	Structure	Conforms to reference structure	Complies	FTIR / NMR

Remarks

Material supplied against this specification is analysed on every production lot and **conforms** to the limits stated above in all tested parameters. Results shown are the typical values obtained for this grade.

Retained samples are held against every export consignment. Store in tightly closed original packing, in a cool, dry, well-ventilated place away from incompatible materials and direct sunlight.

Checked and Approved by

Prem Panchal
Quality Assurance
Scapex Exports Pvt. Ltd.

This document sets out the standard specification for the product named above and applies to all consignments of this grade. It is issued by Scapex Exports Pvt. Ltd. as manufacturer and supplier. Refer to the Material Safety Data Sheet (MSDS) before handling.