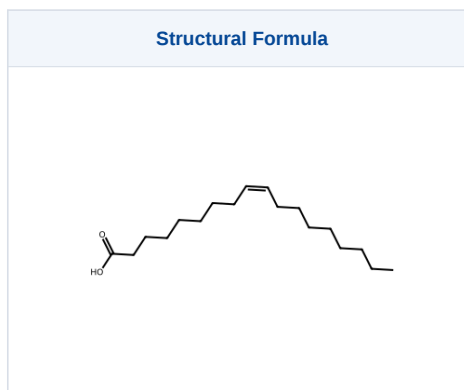


CERTIFICATE OF ANALYSIS

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	cis-9-Octadecenoic acid
C.A.S. Number	112-80-1
Molecular Formula	C18H34O2
Molecular Weight	282.47
Grade / Standard	70-80% technical
Physical Form	Pale yellow liquid
Product Category	Surfactants & Oleochemicals
Country of Origin	India



ANALYTICAL RESULTS

S. No.	Test Parameter	Specification	Result	Method
1	Description	Pale yellow liquid	Complies	Visual
2	Identification	Conforms to the structure of the substance	Complies	FTIR / Chemical test
3	Assay	70.0 – 80.0 % w/w	74.11	Titrimetry (Epton / two-phase)
4	pH (10 % aqueous solution)	6.0 – 9.0	7.9	Potentiometry
5	Colour (Klett, 5 % solution)	Not more than 40	8	Klett colorimetry
6	Free Oil / Unsulphated Matter	Not more than 2.0 % w/w	0.75	Solvent extraction
7	Sodium Sulphate	Not more than 1.5 % w/w	0.84	Titrimetry
8	Viscosity at 25 °C	As per specification	4272 cP	Brookfield viscometry
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.