

Sodium Lauryl Sulphate

CAS 151-21-3 · CH₃ · Needles & powder, 90%+

Velora Chemicals Private Limited
Ahmedabad, Gujarat, India
+91 99255 22674 · info@velorachemicals.com

1. Product identity

Product name	Sodium Lauryl Sulphate
Synonyms	SLS, sodium dodecyl sulfate, SLS powder, SLS needles, sodium lauryl sulphate powder
C.A.S. number	151-21-3
Molecular formula	CH ₃ (CH ₂) ₁₁ OSO ₃ Na (C ₁₂ H ₂₅ NaO ₄ S)
Molecular weight	288.38 g/mol
Grade supplied against	Needles & powder, 90%+
Appearance	White to cream or pale-yellow needles, flakes, crystals or free-flowing powder with a faint fatty or soapy odour. Needles and 90 %+ powder grades differ in particle form and bulk density, not in chemistry.
Product group	Surfactants & Oleochemicals
HSN code	3402 39 00
Country of origin	As stated on the producer's documents for the lot supplied; confirmed at offer stage
Packing	25 kg bag
Storage	Store in a cool, dry, well-ventilated place with the container tightly closed. Protect from sunlight and from moisture (powder cakes and lumps). Keep away from strong acids, strong bases and oxidising agents. Where the grade is self-classified as a flammable solid, store in a fireproof location away from heat and ignition sources and control dust (Loba Chemie SDS). Avoid dust generation during transfer.

2. Analytical specification

S. No.	Test parameter	Specification	Method
1	Description	White to cream or pale-yellow needles, flakes, crystals or free-flowing powder with a faint fatty or soapy odour. Needles and 90 %+ powder grades differ in particle form and bulk density, not in chemistry.	Visual
2	Identification	Conforms to the substance supplied	Instrumental or chemical test, per method agreed
3	Assay / grade	Needles & powder, 90%+	Titrimetry or instrumental, per method agreed
4	Physical state	Solid (needles, flakes or powder)	Visual

S. No.	Test parameter	Specification	Method
5	Solubility in water	Readily soluble. 130 g/L at 20 C (Loba Chemie SDS); 15 g/100 mL at 20 C and '1 g dissolves in 10 mL water, giving an opalescent solution' (PubChem/Merck). Solutions foam strongly.	Per the test method agreed
6	pH	8.5 to 10.5 in a 1 % w/w aqueous solution at 20 C (Loba Chemie SDS). Other SDS state only 'slightly alkaline' with no concentration given (Spectrum Chemical). Mildly alkaline in use dilutions.	Potentiometry on an aqueous suspension
7	Relative density	About 1.01 g/cm ³ (Spectrum Chemical SDS); PubChem records 'greater than 1.1 at 68 F'. Loba Chemie's figure of 0.37 g/cm ³ is a powder bulk density, not a true density - do not publish it as specific gravity.	Pyknometry or gas displacement
8	Melting / freezing point	204-207 C (Loba Chemie and Spectrum Chemical SDS; PubChem/CRC give 204-205.5 C). The substance decomposes at or about its melting point.	Thermal analysis
9	Boiling point	Not available (decomposes before boiling)	Not applicable
10	Flash point	Not meaningful for this solid. Loba Chemie reports greater than 100 C (closed cup); Spectrum Chemical reports 'no data available'. Flash point is not the governing flammability property for a powder - the relevant question is whether it meets the Flammable Solids (H228) criteria, on which producers disagree (see ghs_hazards and un_number).	Closed cup
11	Additional parameters	To the specification agreed before order	As agreed

3. Transport classification

Genuinely producer-dependent - both of the following are in current use and neither is wrong in itself: (a) UN 1325, and (b) not regulated. Loba Chemie declares UN 1325; Spectrum Chemical declares 'not regulated' for DOT, TDG, MEX, ICAO, IATA, IMDG, RID, ADR and ADN. · Class 4.1 (Flammable solid) where UN 1325 is declared; no class where the producer declares the material not regulated. · Packing group III where UN 1325 is declared (Loba Chemie); not applicable where the producer declares the material not regulated (Spectrum Chemical).

Proper shipping name: FLAMMABLE SOLID, ORGANIC, N.O.S. (Sodium lauryl sulphate) where UN 1325 Class 4.1 PG III is declared; otherwise 'Not regulated'. The divergence is real and traceable: only about 38.9 % of ECHA notifiers self-classify the substance as a flammable solid (H228), and that classification is what drives the Class 4.1 entry. Whether a given lot is a dangerous good therefore depends on the producer's own burning-rate test result for that grade and particle form. Declare transport on the basis of your own supplier's SDS and test data for the specific grade shipped, and do not copy one across from another producer.

What this document is. This is a product specification sheet. It states the grade this material is supplied against, its packing and its identity. **It is not a certificate of analysis, it carries no test results, and it certifies no batch.** Tested values for the consignment actually loaded appear on the batch certificate of analysis issued against that batch, which travels with the despatch documents. Identity and physical data are drawn from PubChem, the ECHA CLP inventory and ILO safety cards; the producer's documents for the grade quoted govern. Velora Chemicals Private Limited is a bulk supplier and trader, not a manufacturer.