

Title: **MATERIAL SAFETY DATA SHEET (MSDS)**
LINEAR ALKYL BENZENE SULFONIC ACID (LABSA)

Section 1: Chemical Product and Company Identification

Product Name: Linear Alkyl Benzene Sulfonic Acid

Chemical Name: Not applicable

Trade Name: LABSA

Synonyms: LABSA, Dodecylbenzene Sulfonic Acid,
 Laurylbenzene Sulfonic Acid,
 Laurylbenzene Sulfonate

General Chemical formula: R-C₆H₄SO₃H (R = C₉H₁₉, C₁₀H₂₁, C₁₁H₂₃, C₁₂H₂₅, C₁₃H₂₇ or C₁₄H₂₉)

Recommended Use: It is used as raw material for synthetic detergent industry, Laundry, dishwasher powder detergent, detergent gels, liquid soaps, cleaning powder and fatty soaps. As mercerized and washing agents used in the textile industry.

Section 2 : Composition and Information on Ingredients

Composition:

Items	Composition
Colour (Klett)	≤ 50.0
Active Matter (Sulfonic Acid) %	≥ 96.0
Free Acid (H ₂ SO ₄) %	≤ 1.5
Free Oil (Linear Alkyl Benzene) %	≤ 2.0
Moisture (H ₂ O) %	≤ 1.0

Name	Concentration	CAS No.	EC No.	SYMBOL	R Phrases
Sulfuric Acid	1.5 % Max.	7664-93-9	016-020-00-8	C-Corrosive	R 35

Section 3: Hazards Identification

Adverse Human Health Effects :

The product is a corrosive substance. Contact with the eyes may cause ocular lesions and contact with the skin may cause burns. It is seriously irritating to the mucous if swallowed. The product is harmful if ingested.

Environmental Effects:

The product is not classified as dangerous to environment. The user is advised to use anyway good work practice and to avoid contamination of environment.

Other Effects:

The product is a strong acid which reacts exothermally with bases. Dilution with water produces heat.

Section 4 : First Aid Measures**Ingestion:**

The product may cause severe irritation of the mouth and esophagus. If accidentally ingested, administer water. Do not induce vomiting. Call a physician immediately.

Inhalation:

The product is not volatile. If under particular conditions, such as in the case of fire, fumes or aerosols are inhaled, remove the patient to a well-ventilated location and call a physician.

Eye Contact:

Flush eyes immediately with running water for a long time. Seek medical assistance immediately.

Skin Contact:

The product may cause burns. Remove the contaminated clothing and wash with plenty of water and call a physician immediately.

Annotations To a Physician:

The product is a high foaming anionic surfactant. If gastric lavage is necessary, then use a silicone antifoam (dimethicone).

Section 5: Fire and Explosion Data**General Information:**

The product poses little risk of ignition. If it happens to be involved in a Fire, keep the tank cooled by means of water spray in order to avoid the decomposition of the product.

Suitable Extinguishing Media:

Water spray, foam, carbon dioxide.

Not Suitable Extinguishing Media:

None in particular.

Specific Hazards:

Combustion produces carbon dioxide, carbon monoxide and oxides of Sulphur. When heated to decomposition, toxic fumes of SO₂ and SO₃ are emitted.

Special Equipment:

For large fires, wear self-contained breathing apparatus.

Section 6: Accidental Release Measures**Personal Precautions:**

Avoid direct contact with the product. Wear rubber gloves, rubber boots, face shield and keep close by a gas mask provided with filter for acid vapors.

Environmental Precautions:

Surround the spill with earth or sand. Collect the spilled material in suitable Containers, if necessary absorb the spill onto inert materials. Dispose of material according to the requirements of local law. In case of Leaking into sewer inform the local authorities.

Methods For Cleaning Up:

Neutralize the residue of the product with NaOH or with caustic lime. Wash the contaminated area with plenty of water. If excessive foam is produced, use a silicone based antifoam to bring it down.

Section 7: Handling and Storage

Avoid contact with the product. While handling the product, wear a protective apron, rubber or PVC gloves and a face shield. Handle the product in well ventilated areas. Neutralize with base under controlled conditions. Do not heat above 50°C. Compatible materials: stainless steel, mild steel, plastic materials. Incompatible with galvanized steel, aluminum, copper alloys.

Section 8: Exposure Controls/Personal Protection**Precautionary Measures:**

Installation of an eyewash fountain is recommended. Do not eat or drink onto the work place, When handling the product use approved protective clothing, rubber or PVC gloves, and a face shield.

Personal Protective Equipment:

Wear safety goggles or a face shield and approved protective clothing.

Threshold Limit Value:

Not established.

REQUIREMENTS FOR PERIODIC HEALTH CHECK UP:

Specific measures are not foreseen.

Section 9: Physical and Chemical Properties

Appearance at 20°C:	Brown viscous liquid
Odour:	Of sulfur
Nominal Active Matter Concentr:	96 ~ 97% m/m
Average Molecular Mass:	320 ~ 326
Solubility At 20°C:	<ul style="list-style-type: none">• Water: Soluble• Ethanol: Soluble• Acetone: Not compatible• Aliphatic Hydrocarbons: Insoluble
Mass Density At 20°C :	~ 1.070 g/cm ³
Viscosity At 20°C :	~ 1500°C 2000 mPa.s.
Melting Range:	~ - 10°C
Boiling Point:	~ 315°C (Decomposes)
Vapour Pressure At 20°C:	Below 0.15 (0.001 mm Hg).
Vapour Density (air = 1):	Not applicable to this product
Flash Point (PMcc):	>200°C.
Auto-ignition Temperature:	Not applicable to this product
Decomposition Temperature:	> 100°C
pH:	< 1 (Acid)
Explosion Properties:	Not pertinent to this product
Oxidizing Properties:	Not pertinent to this product

Section 10: Stability and Reactivity Data

Hazardous Decomposition Products:

In case of overheating, sulfur oxides can be emitted.

Conditions To Avoid:

Do not heat above 80°C, 90°C.

Materials To Avoid :

Neutralization with bases under uncontrolled conditions.

Intended Use And Transformation:

The product maybe neutralized under controlled conditions with the appropriate base to produce the corresponding salt.

Section 11: Toxicological Information

Possible Routes Of Penetration:

Ingestion and contact.

Ingestion:

Corrosive substance, harmful for ingestion.

Oral Acute LD50:

2,000 mg/Kg

Eye Contact:

Severe eye irritant (rabbit). It may cause irreversible damage to the eyes.

Skin Contact:

Contact may cause ulcerations.

Sensitization:

Not sensitizing.

Inhalation:

Inhalation is possible only as an aerosol. Strong irritant to respiratory passages.

Section 12: Ecological Information

Environmental Distribution:

Water is likely to be the main transport medium for the chemical, to estimate its possible environmental distribution.

Primary Biodegradability:

> 90% (OECD screening test (sodium salt)) The surfactant fulfils the requisite minimum requirements of primary Biodegradability.

Abiotic Degradability:

Not available

Ecotoxicity:

2.49 mg O₂/mg

Chemical Oxygen Demand(COD) :

Not available

LOG P o/w:

Not applicable, surface active substance.

BCF:

Insufficient available information.

Section 13: Disposal Considerations

Dispose of product in authorized places/methods in observance with current laws. It may be treated in a biological waste water treatment plant.

Section 14: Transport Information

UN Classification Number:	2586
Name Of The Delivering Product:	Linear Alkyl Benzene Sulphonic Acid/LABSA90%
Packing Instruction:	P001
Packaging Group	III
Class:	8
Marine Pollutant:	No
EMS NUMBER:	F-A, S-B

Section 15: Other Regulatory Information**Classification And Labelling Provisional****Symbols of Hazard:****Risk Phrases:**

R 22 - Harmful if swallowed. R 34 - Causes burns.

Safety Advices:

S 26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical help.

S 28 - After contact with skin, wash immediately with plenty of water.

S 36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

Section 16: Other Information

Other Special Considerations: Not available

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