



MATERIAL SAFETY DATA SHEET (MSDS)

Linear Alkyl Benzene Sulfonic Acid (LABSA)

1. Identification of the Substance

Product Name: Linear Alkyl Benzene Sulfonic Acid

Abbreviation: LABSA

Chemical Family: Organic Sulfonic Acid

CAS Number: 27176-87-0

Molecular Formula: $C_6H_4SO_3H-R$ (R = $C_{10}-C_{14}$ alkyl chain)

Recommended Use:

- Detergent manufacturing
- Industrial and household cleaners
- Emulsifier and surfactant applications

Restrictions on Use: Not intended for direct consumer handling without formulation

2. Hazard Identification (GHS)

GHS Classification:

- Skin Corrosion: Category 1
- Serious Eye Damage: Category 1

Signal Word: DANGER

Hazard Statements:

- Causes severe skin burns and eye damage
- Harmful if swallowed
- May cause respiratory irritation if inhaled

**Precautionary Statements:**

- Wear protective gloves, clothing, and eye protection
- Avoid breathing vapors or mist
- Wash hands thoroughly after handling

3. Composition / Information on Ingredients

Component	Concentration
Linear Alkyl Benzene Sulfonic Acid	≥ 90%
Free Sulfuric Acid	≤ 4–7%
Free Oil	≤ 1%

4. First Aid Measures**Skin Contact:**

Immediately remove contaminated clothing. Rinse skin with plenty of water for at least 15 minutes. Seek medical attention if irritation persists.

Eye Contact:

Rinse cautiously with clean water for at least 15 minutes. Remove contact lenses if present. Get immediate medical help.

Inhalation:

Move the person to fresh air. Keep at rest. Seek medical attention if breathing difficulty occurs.

Ingestion:

Do NOT induce vomiting. Rinse mouth with water. Get medical assistance immediately.



5. Firefighting Measures

Suitable Extinguishing Media:

- Water spray
- Foam
- Dry chemical
- Carbon dioxide (CO₂)

Hazards from Combustion:

- Sulfur oxides (SO_x)
- Carbon oxides

Protective Equipment:

Firefighters should wear full protective gear and self-contained breathing apparatus.

6. Accidental Release Measures

Personal Precautions:

- Wear protective gloves, goggles, and acid-resistant clothing
- Avoid skin and eye contact

Environmental Precautions:

- Prevent release into drains and waterways

Cleanup Method:

- Neutralize with sodium bicarbonate or lime
- Absorb with inert material (sand, earth)
- Dispose of according to local regulations



7. Handling and Storage

Handling:

- Handle in well-ventilated areas
- Avoid direct contact with skin and eyes
- Use corrosion-resistant equipment

Storage:

- Store in cool, dry, ventilated area
- Use plastic or stainless-steel containers
- Keep away from oxidizing agents and heat

8. Exposure Controls / Personal Protection

Engineering Controls:

Local exhaust ventilation recommended

Personal Protective Equipment (PPE):

Protection Type	Requirement
Eye Protection	Chemical safety goggles
Hand Protection	Acid-resistant gloves
Body Protection	Protective clothing
Respiratory Protection	If ventilation is insufficient



9. Physical and Chemical Properties

Property	Value
Appearance	Light yellow to brown liquid
Odor	Slight
pH (1% solution)	< 2
Density @ 20°C	~1.07 g/cm ³
Solubility	Soluble in water
Flash Point	Not flammable
Viscosity	Low to medium

10. Stability and Reactivity

Stability: Stable under normal conditions

Conditions to Avoid: Heat, direct sunlight

Incompatible Materials:

- Strong oxidizers
- Strong bases
- Reactive metals

Hazardous Decomposition Products:

Sulfur oxides, carbon oxides



11. Toxicological Information

Acute Toxicity:

- Skin: Corrosive
- Eyes: Causes serious damage

Chronic Effects:

Prolonged exposure may cause skin irritation or burns

Carcinogenicity:

Not classified as carcinogenic

12. Ecological Information

Biodegradability: Readily biodegradable

Aquatic Toxicity: Harmful in concentrated form

Environmental Impact: Avoid uncontrolled discharge

13. Disposal Considerations

Dispose of LABSA and contaminated packaging according to **local, national, and international regulations**. Neutralize before disposal where required.

14. Transport Information

UN Number: 2584

Proper Shipping Name: Alkyl Sulfonic Acids, Liquid

Hazard Class: 8 (Corrosive)

Packing Group: II

Transport Regulations: ADR / IMDG / IATA compliant



15. Regulatory Information

- GHS compliant
- ISO quality management compatible
- Transport regulated as corrosive liquid

16. Other Information

This MSDS is provided in good faith based on available data. Users must determine suitability for their application and comply with all regulations.