



## 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<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H–R (R = C<sub>10</sub>–C<sub>14</sub> 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 (CO<sub>2</sub>)

### Hazards from Combustion:

- Sulfur oxides (SO<sub>x</sub>)
- 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/cm³
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.