



## MATERIAL SAFETY DATA SHEET

CONTACT : **LEONID CHEMICALS**  
Leonid Chemicals Pvt Ltd  
62/A-2 1st Stage, Yeshwanthpur Industrial Suburb  
Ashokpuram School Road  
Bangalore-560 022, Karnataka, INDIA  
Ph: +91-80-2337 8354, Fax: +91-80-2357 4827

Tetraethylammonium Hydrogen Sulfate  
88419

### SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**MSDS Name:** Tetraethylammonium Hydrogen Sulfate

**Catalog Numbers:**

T066

**Synonyms:**

None

**Company Identification:**

LEONID CHEMICALS

62/A-2 2nd Stage, Industrial Suburb

Yeshwanthpur, Bangalore -22, INDIA

Ph- +91-80-23378354

### SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS #	:	16873-13-5
Chemical Name	:	Tetraethylammonium Hydrogen Sulfate
%	:	100
EINECS#	:	240-899-9
Hazard Symbols	:	None Listed
Risk Phrases	:	None Listed

### SECTION 3 - HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Not available.

#### Potential Health Effects

Eye:

May cause eye irritation.

Skin:

May cause skin irritation.

Ingestion:

May cause irritation of the digestive tract.

Inhalation:

May cause respiratory tract irritation.

Chronic:

No information found.

### SECTION 4 - FIRST AID MEASURES



**Eyes:**

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Skin:**

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

**Ingestion:**

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:**

Remove from exposure and move to fresh air immediately. Get medical aid if cough or other symptoms appear.

**Notes to Physician:**

---

## **SECTION 5 - FIRE FIGHTING MEASURES**

---

**General Information:**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:**

In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

---

## **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

---

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**

Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal.

---

## **SECTION 7 - HANDLING and STORAGE**

---

**Handling:**

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

**Storage:**

Store in a cool, dry place. Keep container closed when not in use.

---

## **SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

---

#### Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

#### Personal Protective Equipment

##### Eyes:

Not available.

##### Skin:

Wear appropriate protective gloves and clothing to prevent skin exposure.

##### Clothing:

Wear appropriate protective clothing to minimize contact with skin.

##### Respirators:

Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

---

### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

---

Physical State: Solid

Color: white to off-white

Odor: Not available.

pH: Not available.

Vapor Pressure: Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: 151-154C

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits, lower: Not available.

Explosion Limits, upper: Not available.

Decomposition Temperature:

Solubility in water: Soluble in water.

Specific Gravity/Density:

Molecular Formula:  $(\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2)_4\text{NH}_2\text{PO}_4$

Molecular Weight: 339.2441

---

### SECTION 10 - STABILITY AND REACTIVITY

---

#### Chemical Stability:

Stable under normal temperatures and pressures.

#### Conditions to Avoid:

Moisture, strong oxidants.

#### Incompatibilities with Other Materials:

Strong oxidizing agents

#### Hazardous Decomposition Products:

Nitrogen oxides, sulfur dioxide, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported

---

## SECTION 11 - TOXICOLOGICAL INFORMATION

---

**RTECS#:**

CAS# 16873-13-5 unlisted.

**LD50/LC50:**

Not available.

**Carcinogenicity:**

Tetraethylammonium Hydrogen Sulfate -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

See actual entry in RTECS for complete information.

---

## SECTION 12 - ECOLOGICAL INFORMATION

---

---

## SECTION 13 - DISPOSAL CONSIDERATIONS

---

Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.

---

## SECTION 14 - TRANSPORT INFORMATION

---

**IATA**

Not regulated as a hazardous material.

**IMO**

Not regulated as a hazardous material.

**RID/ADR**

Not regulated as a hazardous material.

---

## SECTION 15 - REGULATORY INFORMATION

---

**European/International Regulations**

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available.

Risk Phrases:

Safety Phrases:

**WGK (Water Danger/Protection)**

CAS# 16873-13-5: No information available.

**United Kingdom Occupational Exposure Limits**

**United Kingdom Maximum Exposure Limits**

**Canada**

None of the chemicals in this product are listed on the DSL/NDSL list.

CAS# 16873-13-5 is not listed on Canada's Ingredient Disclosure List.

**Exposure Limits**

US FEDERAL  
TSCA

CAS# 16873-13-5 is not listed on the TSCA inventory.  
It is for research and development use only.

---

**SECTION 16 - ADDITIONAL INFORMATION**

---

MSDS Creation Date: 6/23/2004 Revision #0 Date: Original.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

CHEMLABS™

