



LTS Research Laboratories, Inc.
Safety Data Sheet
Tetrahydrofuran

1. Product and Company Identification

Trade Name: Tetrahydrofuran
Chemical Formula: C₄H₈O
Recommended Use: Scientific research and development

Manufacturer/Supplier: LTS Research Laboratories, Inc.
Street: 2001 Oaks Pkwy
City: Belmont
State: North Carolina
Zip Code: 28012
Country: USA
Tel #: 855-587-2436 / 855-lts-chem

24-Hour Emergency Contact: 800-424-9300 (US & Canada)
+1-703-527-3887 (International)

2. Hazards Identification

Signal Word: Danger



Hazard Statements:

- H225: Highly flammable liquid and vapor
- H302: Harmful if swallowed
- H319: Causes serious eye irritation
- H335: May cause respiratory irritation
- H336: May cause drowsiness or dizziness
- H351: Suspected of causing cancer

Precautionary Statements:

- P202: Do not handle until all safety precautions have been read and understood
- P210: Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking
- P233: Keep container tightly closed
- P240: Ground/bond container and receiving equipment
- P241: Use explosion-proof electrical/ ventilating/ lighting/ equipment
- P242: Use only non-sparking tools
- P243: Take precautionary measures against static discharge
- P261: Avoid breathing mist or vapors
- P264: Wash skin thoroughly after handling
- P270: Do not eat, drink or smoke when using this product
- P271: Use only outdoors or in a well-ventilated area
- P280: Wear protective gloves/ protective clothing/ eye protection/ face protection
- P301 + P312 + P330: IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth
- P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all Contaminated clothing. Rinse skin with water/ shower
- P304 + P340 + P312: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P308 + P313: IF exposed or concerned: Get medical advice/ attention
P337 + P313: If eye irritation persists: Get medical advice/ attention
P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-Resistant foam to extinguish
P403 + P233: Store in a well-ventilated place. Keep container tightly closed
P403 + P235: Store in a well-ventilated place. Keep cool
P405: Store locked up
P501: Dispose of contents/container in accordance with local/regional/national/international regulations

HMIS Health Ratings (0-4):

Health:	N/A
Flammability:	N/A
Physical:	N/A

3. Composition

Chemical Family:	Organometallic
Additional Names:	THF, Butylene oxide, Oxolane, Tetramethylene oxide

Tetrahydrofuran (C₄H₈O)

Percentage:	100 wt%
CAS #:	109-99-9
EC #:	203-726-8



4. First Aid Procedures

General Treatment:	Seek medical attention if symptoms persist.
Special Treatment:	None
Important Symptoms:	N/A
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult. Seek medical attention.
Ingestion:	Rinse mouth with water. Do not induce vomiting. Seek medical attention.
Skin:	Wash affected area with mild soap and water. Remove any contaminated clothing. Seek medical attention.
Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention.

5. Firefighting Measures

Flammability:	Flammable
Extinguishing Media:	No special restrictions – use suitable extinguishing agent for surrounding material and type of fire.
Spec. Fire Fighting Procedure:	Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

6. Accidental Release Measures

If Material Is Released/Spilled:	Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.
Environmental Precautions:	Isolate runoff to prevent environmental pollution.

7. Handling and Storage

Handling Conditions:	Wash thoroughly after handling.
Storage Conditions:	Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in section 10.
Work/Hygienic Maintenance:	Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.
Ventilation:	Provide sufficient ventilation to maintain concentration at or below threshold limit.

8. Exposure Controls and Personal Protection

Permissible Exposure Limits:	200 ppm as C ₄ H ₈ O, long-term value
Threshold Limit Value:	50 ppm as C ₄ H ₈ O, long-term value
Special Equipment:	None
Respiratory Protection:	Recommended Filter type: Filter A (acc. to DIN 3181) for vapors of organic compounds
Protective Gloves:	Rubber gloves Check gloves prior to each use
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

9. Physical and Chemical Characteristics

Color	N/A
Form:	Liquid
Odor:	N/A
Water Solubility:	N/A
Boiling Point:	65 °C
Melting Point:	-108.44 °C
Flash Point:	-21.2 °C
Autoignition Temperature:	215 °C
Density:	0.89 g/cm ³
Molecular weight:	72.11 g/mol

10. Reactivity

Stability:	Stable under recommended storage conditions. Formation of peroxides possible. Vapors may form explosive mixture with air
Reacts With:	N/A
Incompatible Conditions:	Light, Air
Hazardous Decomposition Products:	Carbon oxides

11. Toxicological Information

Potential Health Effects:

Eyes:	May cause irritation
Skin:	May cause irritation
Ingestion:	May cause irritation
Inhalation:	May cause irritation
Chronic:	N/A

Signs & Symptoms:	N/A
Aggravated Medical Conditions:	N/A

Median Lethal Dose: LD50 Oral- 1650 mg/kg for rat by mouth

Carcinogen: Suspect of causing cancer
IARC: 2B - Group 2B: Possibly carcinogenic to humans (Tetrahydrofuran)
NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

12. Ecological Information

Aquatic Toxicity:	N/A
Persistent Bioaccumulation Toxicity:	N/A
Very Persistent, Very Bioaccumulative:	N/A
Notes:	N/A

13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

14. Transportation Data

Hazardous: Hazardous for transportation.



Hazard Class:	3 Flammable Liquid
Packing Group:	II
UN Number:	UN2056
Proper Shipping Name:	Tetrahydrofuran

15. Regulatory Information

Sec 302 Extremely Hazardous:	No
Sec 304 Reportable Quantities:	N/A
Sec 313 Toxic Chemicals:	No

16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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