

SAFETY DATA SHEET

TETRAHYDROFURAN (THF)

CAS No.: 109-99-9

This Safety Data Sheet is compiled from well-established published chemical, GHS classification and regulatory reference sources for this substance. It is supplied by Suraj Chemicals as the distributor/supplier of record and is not a manufacturer-issued document. Users should also consult the specific manufacturer's SDS where available.

1. IDENTIFICATION

Product Name	Tetrahydrofuran (THF)
CAS Number	109-99-9
Recommended Use	Industrial / commercial chemical trading and distribution
Supplier	Suraj Chemicals, No 92, Govindappa Naicken Street, Shiva Complex, Chennai - 600001, India
Emergency Telephone	+91 - 9840284032, 9176135357 / +91 - 44 - 25393652

2. HAZARD(S) IDENTIFICATION

GHS Signal Word	Danger
HAZARD CLASSIFICATION - Flammable liquid - Category 2 - Serious eye irritation - Category 2A - Specific target organ toxicity, single exposure - Category 3 (narcotic effects) - Carcinogenicity - Category 2	
HAZARD STATEMENTS - H225 - Highly flammable liquid and vapour - H319 - Causes serious eye irritation - H335 - May cause respiratory irritation - H351 - Suspected of causing cancer	
PRECAUTIONARY STATEMENTS - P201 - Obtain special instructions before use - P210 - Keep away from heat, sparks, open flames and hot surfaces; no smoking - P233 - Keep container tightly closed - P240 - Ground/bond container and receiving equipment - P241 - Use explosion-proof electrical/ventilating/lighting equipment - P261 - Avoid breathing vapours - P280 - Wear protective gloves/eye protection/face protection - P305+P351+P338 - IF IN EYES: rinse cautiously with water for several minutes; remove contact lenses if present; continue rinsing - P370+P378 - In case of fire, use extinguishing media suitable for the surrounding fire - P403+P235 - Store in a well-ventilated place and keep cool	

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Tetrahydrofuran (THF)
CAS Number	109-99-9
Physical State	Liquid
Appearance / Odour	Colorless liquid with a characteristic ether-like odor.

4. FIRST-AID MEASURES

Eye Contact	Rinse cautiously with water for several minutes; remove contact lenses if present; continue rinsing and seek medical attention if irritation persists.
Skin Contact	Wash off with plenty of water and soap; seek medical attention if irritation persists.
Inhalation	Remove to fresh air and keep at rest in a position comfortable for breathing; seek medical attention if symptoms of dizziness or respiratory irritation persist.
Ingestion	Rinse mouth; do NOT induce vomiting; give water to drink if conscious; seek immediate medical attention.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Dry chemical, carbon dioxide, alcohol-resistant foam; water spray to cool exposed containers.
Unsuitable Extinguishing Media	Avoid a straight/high-pressure water stream, which can spread the fire.
Special Hazards	Highly flammable, low-flash-point liquid producing vapor that readily forms explosive mixtures with air; can form explosive peroxides on prolonged storage/exposure to air and light, which may detonate on concentration (e.g., during distillation to near-dryness); combustion produces carbon monoxide and carbon dioxide.

6. ACCIDENTAL RELEASE MEASURES

Measures	Eliminate all ignition sources, ventilate the area, contain the spill with inert absorbent, prevent entry into drains/waterways, and collect for disposal using non-sparking tools; check for peroxide formation before handling aged material.
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7. HANDLING AND STORAGE

Handling Precautions	Use only with adequate ventilation and explosion-proof equipment, keep away from heat/sparks/open flame, use grounded/bonded equipment, avoid inhalation and eye contact, and use/store with a peroxide inhibitor, testing periodically for peroxide accumulation.
Storage Conditions	Store in a cool, well-ventilated, flammables-rated area away from heat, light and oxidizers, in tightly closed, inhibited containers; avoid prolonged storage and test for peroxides before use, especially if opened containers have been stored for extended periods.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits / PPE	OSHA PEL / ACGIH TLV ~200 ppm TWA (250 ppm STEL); use chemical-resistant gloves (e.g., Viton, laminate film — standard nitrile/butyl offer limited protection), chemical splash goggles, and a NIOSH-approved organic vapor respirator with explosion-proof local exhaust ventilation where vapor exceeds exposure limits.
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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance / Odour	Colorless liquid with a characteristic ether-like odor.
Boiling Point	~66 C
Melting Point	~-108 C
Flash Point	~-14 to -17 C (closed cup)
Density / Specific Gravity	~0.889 g/cm3 at 20 C
Water Solubility	Miscible with water in all proportions
pH Value	Not applicable (non-aqueous, essentially neutral organic liquid)

10. STABILITY AND REACTIVITY

Stability	Stable when inhibited and stored properly; can slowly form explosive peroxides on exposure to air and light over time, particularly in the absence of stabilizer.
Incompatible Materials	Strong oxidizers, strong acids, and materials that can catalyze peroxide formation/decomposition.
Hazardous Decomposition	Carbon monoxide and carbon dioxide on combustion; peroxide decomposition products.

11. TOXICOLOGICAL INFORMATION

Summary	Causes serious eye irritation and respiratory tract irritation; vapor has narcotic/CNS-depressant effects (headache, dizziness) at elevated concentrations; suspected human carcinogen based on animal study evidence (IARC/EU classification); not classified as a reproductive toxicant or mutagen based on current data.
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12. ECOLOGICAL INFORMATION

Summary	Readily biodegradable; low bioaccumulation potential; not classified as hazardous to the aquatic environment under standard GHS criteria based on available data.
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13. DISPOSAL CONSIDERATIONS

Disposal Method	Dispose of as hazardous waste through a licensed waste management/incineration facility in accordance with local regulations; test aged waste for peroxide content before handling/disposal.
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14. TRANSPORT INFORMATION

UN Number	UN2056
Transport Hazard Class	Class 3 (Flammable liquid)
Packing Group	II

15. REGULATORY INFORMATION

Notes	Widely used industrial solvent, particularly for PVC and polymer applications; classified as highly flammable and a suspected carcinogen under GHS, OSHA HCS and EU CLP; regulated for transport under IMDG/ADR/IATA as UN2056, Class 3, Packing Group II; peroxide-forming chemical requiring periodic testing per standard laboratory/industrial safety practice.
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16. OTHER INFORMATION

Prepared By	Suraj Chemicals, Technical / QA Desk
Date of Issue	29 Sep 2026
Note	This SDS is compiled from well-established published GHS hazard classification data and general chemical reference sources for this substance, in the standard 16-section format. Values are believed accurate but Suraj Chemicals makes no warranty, express or implied, regarding their completeness. Users should evaluate suitability for their own specific use.

(This document is computer generated and therefore does not require any signature.)

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