

### SECTION 1: Identification

#### 1.1. Identification

Product form	: Substance
Trade name	: Tetrahydrofuran - 99.9%
CAS-No.	: 109-99-9
Formula	: C <sub>4</sub> H <sub>8</sub> O
Synonyms	: Butane, 1,4-epoxy- / Cyclotetramethylene oxide / Diethylene oxide / 1,4-Epoxybutane / Furan, tetrahydro- / Oxacyclopentane / THF / Butylene oxide

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture	: Solvent Industrial use Laboratory chemical
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#### 1.3. Supplier

##### Manufacturer

Monument Chemical  
16717 Jacintoport Blvd.  
Houston, TX, 77015  
USA  
T 832-376-2000

[sds@monumentchemical.com](mailto:sds@monumentchemical.com) - [www.monumentchemical.com](http://www.monumentchemical.com)

#### 1.4. Emergency telephone number

Emergency number	: 24 HR CHEMTREC: 1-800-424-9300 (International +1 703-741-5970); 24 HR Emergency Assistance: 1-832-376-2026
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### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Flammable liquids Category 2	H225	Highly flammable liquid and vapor
Acute toxicity (oral) Category 4	H302	Harmful if swallowed
Serious eye damage/eye irritation Category 2A	H319	Causes serious eye irritation
Carcinogenicity Category 2	H351	Suspected of causing cancer
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335	May cause respiratory irritation
Full text of H statements : see section 16		

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: H225 - Highly flammable liquid and vapor  
H302 - Harmful if swallowed  
H319 - Causes serious eye irritation

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### Precautionary statements (GHS US)

H335 - May cause respiratory irritation  
H351 - Suspected of causing cancer  
: P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/Bond container and receiving equipment.  
P241 - Use explosion-proof electrical, lighting, ventilating equipment.  
P242 - Use only non-sparking tools.  
P243 - Take precautionary measures against static discharge.  
P261 - Avoid breathing dust, fume, gas, mist, spray, vapors.  
P264 - Wash hands 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 eye protection, protective clothing, protective gloves.  
P301+P312 - If swallowed: Call a doctor, a POISON CENTER if you feel unwell.  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.  
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.  
P312 - Call a doctor, a POISON CENTER if you feel unwell.  
P330 - Rinse mouth.  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO<sub>2</sub>), dry extinguishing powder, Water spray 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 to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : May form explosive peroxides.

### 2.4. Unknown acute toxicity (GHS US)

No additional information available

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Name	Product identifier	%
Tetrahydrofuran (Main constituent)	CAS-No.: 109-99-9	100

Full text of hazard classes and H-statements : see section 16

### 3.2. Mixtures

Not applicable

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### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Consult an eye specialist. Get medical advice/attention. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER or doctor/physician if you feel unwell. Call a poison center/doctor/physician if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Harmful if swallowed.
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation. Eye irritation.
Symptoms/effects after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

#### 5.2. Specific hazards arising from the chemical

Fire hazard	: Highly flammable liquid and vapor.
Explosion hazard	: May form flammable/explosive vapor-air mixture.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

#### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.
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### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Ventilate area.

## 6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

## 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

## 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep in fireproof place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

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Tetrahydrofuran (109-99-9)	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Tetrahydrofuran
ACGIH OEL TWA [ppm]	50 ppm
ACGIH OEL STEL [ppm]	100 ppm
Remark (ACGIH)	URT irr; CNS impair; kidney dam
Regulatory reference	ACGIH 2022
<b>USA - ACGIH - Biological Exposure Indices</b>	
Local name	TETRAHYDROFURAN
BEI (BLV)	2 mg/l Parameter: Tetrahydrofuran - Medium: urine - Sampling time: End of shift
Regulatory reference	ACGIH 2022
<b>USA - OSHA - Occupational Exposure Limits</b>	
Local name	Tetrahydrofuran
OSHA PEL (TWA) [1]	590 mg/m <sup>3</sup>
OSHA PEL (TWA) [2]	200 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
<b>USA - IDLH - Occupational Exposure Limits</b>	
IDLH [ppm]	2000 ppm (10% LEL)
<b>USA - NIOSH - Occupational Exposure Limits</b>	
NIOSH REL (TWA)	590 mg/m <sup>3</sup>
NIOSH REL TWA [ppm]	200 ppm
NIOSH REL (STEL)	735 mg/m <sup>3</sup>
NIOSH REL STEL [ppm]	250 ppm

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Avoid all unnecessary exposure.

#### Hand protection:

Wear protective gloves.

#### Eye protection:

Chemical goggles or safety glasses. Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

Wear appropriate mask

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### Personal protective equipment symbol(s):



### Other information:

Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear, colorless liquid.
Color	: Colorless
Odor	: Fruity odour
Odor threshold	: No data available
pH	: No data available in the literature
Melting point	: Not applicable
Freezing point	: -108 °C (-162°F)
Boiling point	: 65 °C ; 149 °F
Critical temperature	: 267 °C ; 512.6 °F
Critical pressure	: 51880 hPa
Flash point	: -14 °C ; 6.8 °F
Relative evaporation rate (butyl acetate=1)	: 8
Relative evaporation rate (ether=1)	: 2.3
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: 173 hPa (at 20 °C)
Vapor pressure at 50°C	: 587 hPa (Antoine equation)
Relative vapor density at 20°C	: 2.5
Relative density	: 0.88 (25 °C)
Relative density of saturated gas/air mixture	: 1.3
Density	: 0.8833 g/cm <sup>3</sup> (at 25 °C)
Molecular mass	: 72.11 g/mol
Solubility	: Soluble in water. Soluble in ethanol. Soluble in ether. Soluble in acetone. Soluble in chloroform. Soluble in dimethyl sulfoxide. Soluble in oils/fats. Water: miscible Ethanol: > 10 g/100ml Acetone: > 10 g/100ml
Partition coefficient n-octanol/water (Log Pow)	: 0.45 (at 25 °C)
Auto-ignition temperature	: 321 °C ; 609.8 °F
Decomposition temperature	: No data available in the literature
Viscosity, kinematic	: 0.516 mm <sup>2</sup> /s
Viscosity, dynamic	: 0.456 mPa.s (25 °C)
Explosion limits	: 1.8 – 11.8 vol %
Explosive properties	: May form explosive peroxides.
Oxidizing properties	: No data available

### 9.2. Other information

Minimum ignition energy	: 0.54 mJ
Saturation concentration	: 592 g/m <sup>3</sup>
VOC content	: 100 %
Other properties	: Gas/vapour heavier than air at 20°C. Clear. Hygroscopic. Volatile. Neutral reaction. May generate electrostatic charges.

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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Highly flammable liquid and vapor.

#### 10.2. Chemical stability

Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

#### 10.3. Possibility of hazardous reactions

Not established.

#### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

#### 10.5. Incompatible materials

Strong acids. Strong bases.

#### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

Tetrahydrofuran (109-99-9)	
LD50 oral rat	1650 mg/kg
LD50 dermal rat	> 2000 mg/kg body weight
LC50 Inhalation - Rat	54 mg/l/4h
ATE US (oral)	1650 mg/kg body weight
ATE US (vapors)	54 mg/l/4h
ATE US (dust, mist)	54 mg/l/4h

Skin corrosion/irritation : Not classified  
pH: No data available in the literature  
Serious eye damage/irritation : Causes serious eye irritation.  
pH: No data available in the literature  
Respiratory or skin sensitization : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Suspected of causing cancer.

Tetrahydrofuran (109-99-9)	
National Toxicology Program (NTP) Status	Evidence of Carcinogenicity

Reproductive toxicity : Not classified  
STOT-single exposure : May cause respiratory irritation.  
STOT-repeated exposure : Not classified  
Aspiration hazard : Not classified

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Viscosity, kinematic	: 0.516 mm <sup>2</sup> /s
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Harmful if swallowed.
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation. Eye irritation.
Symptoms/effects after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.
Ecology - air	: Not included in the list of substances which may contribute to the greenhouse effect (IPCC). Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Photooxidation in the air. Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).

Tetrahydrofuran (109-99-9)	
LC50 - Fish [1]	1970 – 2360 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 - Fish [2]	2700 – 3600 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

### 12.2. Persistence and degradability

Tetrahydrofuran (109-99-9)	
Persistence and degradability	Biodegradable in the soil. Not readily biodegradable in water.
Chemical oxygen demand (COD)	1.855 g O <sub>2</sub> /g substance
ThOD	2.44 g O <sub>2</sub> /g substance

### 12.3. Bioaccumulative potential

Tetrahydrofuran (109-99-9)	
BCF - Fish [1]	(will not bioconcentrate)
Partition coefficient n-octanol/water (Log Pow)	0.45 (at 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

### 12.4. Mobility in soil

Tetrahydrofuran (109-99-9)	
Surface tension	26400 mN/m (25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.26 – 1.37 (log Koc, Experimental value)

### 12.5. Other adverse effects

Other information	: Avoid release to the environment.
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### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Regional legislation (waste)	: U.S. - RCRA (Resource Conservation Recovery Act) - U Series Wastes - Acutely Toxic Wastes Other Hazardous Characteristics.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Additional information	: Handle empty containers with care because residual vapors are flammable. Flammable vapors may accumulate in the container.
Ecology - waste materials	: Avoid release to the environment.

### SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

#### 14.1. UN number

DOT NA No	: UN2056
UN-No. (IMDG)	: 2056
UN-No. (IATA)	: 2056

#### 14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Tetrahydrofuran
Proper Shipping Name (IMDG)	: TETRAHYDROFURAN
Proper Shipping Name (IATA)	: Tetrahydrofuran
Transport document description (DOT)	: UN2056 Tetrahydrofuran, 3, II
Transport document description (IMDG)	: UN 2056 TETRAHYDROFURAN, 3, II (< -18°C c.c.)
Transport document description (IATA)	: UN 2056 Tetrahydrofuran, 3, II

#### 14.3. Transport hazard class(es)

##### DOT

Transport hazard class(es) (DOT)	: 3
Hazard labels (DOT)	: 3



##### IMDG

Transport hazard class(es) (IMDG)	: 3
Hazard labels (IMDG)	: 3



##### IATA

Transport hazard class(es) (IATA)	: 3
Hazard labels (IATA)	: 3

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### 14.4. Packing group

Packing group (DOT)	: II
Packing group (IMDG)	: II
Packing group (IATA)	: II

### 14.5. Environmental hazards

Other information : No supplementary information available.

### 14.6. Special precautions for user

#### DOT

UN-No.(DOT)	: UN2056
DOT Special Provisions (49 CFR 172.102)	: IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 202
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 60 L
DOT Vessel Stowage Location	: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

#### IMDG

Limited quantities (IMDG)	: 1 L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage)	: S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS
Stowage category (IMDG)	: B
Flash point (IMDG)	: below -18°C c.c.
Properties and observations (IMDG)	: Colourless liquid with an ethereal odour. Flashpoint: below -18°C c.c. Explosive limits: 1.5% to 12% Miscible with water.

#### IATA

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y341
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 353
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 364

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CAO max net quantity (IATA) : 60L  
ERG code (IATA) : 3H

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### Tetrahydrofuran (109-99-9)

CERCLA RQ	1000 lb
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All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

### 15.2. International regulations

#### CANADA

#### Tetrahydrofuran (109-99-9)

Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations

#### Tetrahydrofuran (109-99-9)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### National regulations

#### Tetrahydrofuran (109-99-9)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory  
Listed on KECL/KECI (Korean Existing Chemicals Inventory)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on the Japanese ISHL (Industrial Safety and Health Law)  
Listed on INSQ (Mexican National Inventory of Chemical Substances)  
Listed on the TCSI (Taiwan Chemical Substance Inventory)  
Listed on the NCI (Vietnam - National Chemical Inventory)

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### 15.3. US State regulations

#### Tetrahydrofuran (109-99-9)

State or local regulations	U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Massachusetts - Right To Know List U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs) U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
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California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

### SECTION 16: Other information

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Other information : None.

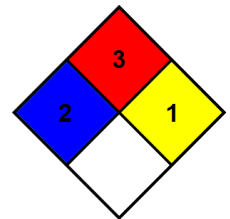
#### Full text of H-phrases

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

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.

NFPA reactivity : 1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.



Hazard Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 3 Serious Hazard - Materials capable of ignition under almost all normal temperature conditions. Includes flammable liquids with flash points below 73 F and boiling points above 100 F. as well as liquids with flash points between 73 F and 100 F. (Classes IB & IC)

Physical : 1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

Personal protection : B - Safety glasses, Gloves

#### Indication of changes:

Section	Changed item	Change	Comments
	Issue date	Added	No additional information available
	UN-No. (TDG)	Added	No additional information available
	Excepted quantities (TDG)	Added	No additional information available
	Hazard labels (TDG)	Added	No additional information available

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	Proper Shipping Name (TDG)	Added	No additional information available
	Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	Added	No additional information available
	Packing group (TDG)	Added	No additional information available
	Explosive Limit and Limited Quantity Index	Added	No additional information available
	Properties and observations (IMDG)	Added	No additional information available
	DOT Packaging Exceptions (49 CFR 173.xxx)	Modified	No additional information available
	Flash point (IMDG)	Added	No additional information available
4	Symptoms/effects after eye contact	Modified	No additional information available
4	First-aid measures after eye contact	Modified	No additional information available
4	First-aid measures after ingestion	Modified	No additional information available
4	First-aid measures after inhalation	Modified	No additional information available
5.1	Suitable extinguishing media	Modified	No additional information available
5.3	Protection during firefighting	Modified	No additional information available
6	Reference to other sections (8, 13)	Modified	No additional information available
6	Protective equipment	Modified	No additional information available
6	Methods for cleaning up	Modified	No additional information available
6	Emergency procedures	Modified	No additional information available
7.1	Hygiene measures	Modified	No additional information available
7.1	Precautions for safe handling	Modified	No additional information available
7.2	Storage conditions	Modified	No additional information available
8.2	Respiratory protection	Modified	No additional information available
8.2	Hand protection	Modified	No additional information available
8.2	Eye protection	Modified	No additional information available
10	Possibility of hazardous reactions	Modified	No additional information available
10	Chemical stability	Modified	No additional information available
10	Hazardous decomposition products	Modified	No additional information available
10	Conditions to avoid	Modified	No additional information available
13	Additional information	Modified	No additional information available

Safety Data Sheet (SDS), USA

# Tetrahydrofuran - 99.9%

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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