

### SECTION 1: Identification

#### 1.1. Identification

Product form	: Substance
Trade name	: 2-Methyl Tetrahydrofuran
Chemical name	:
CAS-No.	: 96-47-9
Product code	: 24707
Formula	: C <sub>5</sub> H <sub>10</sub> O

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

Recommended use	: Use as laboratory reagent, Manufacture of substances
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#### 1.3. Supplier

##### Supplier

Polysciences  
400 Valley Road  
Warrington, PA 18976 - United States  
T +1 215 343 6484 - F +1 215 343 0214  
[info@polysciences.com](mailto:info@polysciences.com) - [www.polysciences.com](http://www.polysciences.com)

#### 1.4. Emergency telephone number

Emergency number	: 24-hour emergency phone number ChemTel 1-800-255-3924
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### SECTION 2: Hazard(s) identification


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

##### GHS US classification

Flammable liquids Category 3	Flammable liquid and vapor
Acute toxicity (oral) Category 4	Harmful if swallowed
Skin corrosion/irritation Category 2	Causes skin irritation
Serious eye damage/eye irritation Category 2B	Causes eye irritation

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

##### GHS US labeling

Hazard pictograms (GHS US)	: 
Signal word (GHS US)	: Warning
Hazard statements (GHS US)	: Flammable liquid and vapor Harmful if swallowed Causes skin irritation Causes eye irritation
Precautionary statements (GHS US)	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

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

No additional information available

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

Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

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Name	Product identifier	%	GHS US classification
2-Methyl Tetrahydrofuran (Main constituent)	(CAS-No.) 96-47-9	≤ 100	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2B, H320

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

### 3.2. Mixtures

Not applicable

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

- First-aid measures general : 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.
- First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.
- 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: Get medical advice/attention.
- First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell. Rinse mouth.

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

- Symptoms/effects after skin contact : Irritation.
- Symptoms/effects after eye contact : Mild eye irritation.

### 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 : Water spray. Dry powder. Foam. Carbon dioxide.

### 5.2. Specific hazards arising from the chemical

- Fire hazard : Highly flammable liquid and vapor. Flammable liquid and vapor.
- Hazardous decomposition products in case of fire : Toxic fumes may be released.

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

- Protection during firefighting : 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

#### 6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes.

#### 6.1.2. For emergency responders

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

### 6.2. Environmental precautions

Avoid release to the environment.

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

- Methods for cleaning up : Take up liquid spill into absorbent material. 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

For further information refer to section 13.

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. 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. Always wash hands after handling the product. Wash contaminated clothing before reuse.

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

- Technical measures : Ground/bond container and receiving equipment.
- Storage conditions : Store at room temp. Store in a well-ventilated place. Keep cool. Keep container tightly closed.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 2-Methyl Tetrahydrofuran (96-47-9)

No additional information available

#### 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

##### Hand protection:

Protective gloves

##### Eye protection:

Safety glasses

##### Skin and body protection:

Wear suitable protective clothing

##### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

##### Personal protective equipment symbol(s):



### SECTION 9: Physical and chemical properties

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

- Physical state : Liquid
- Appearance : Clear liquid.
- Color : No data available
- Odor : No data available
- Odor threshold : No data available
- pH : No data available
- Melting point : no data
- Freezing point : No data available
- Boiling point : 184 °F F
- Flash point : 12 °F F
- Relative evaporation rate (butyl acetate=1) : No data available

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Flammability (solid, gas)	: Not applicable.
Vapor pressure	: 14 mm Hg
Relative vapor density at 20°C	: 4.48
Relative density	: No data available
Molecular mass	: 86.13
Solubility	: Water: 15 %
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Highly flammable liquid and vapor. Flammable liquid and vapor.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 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

ATE US (oral)	500 mg/kg body weight
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Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Mild eye irritation.

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### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Additional information : Flammable vapors may accumulate in the container.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN2536 Methyltetrahydrofuran, 3, II  
UN-No.(DOT) : UN2536  
Proper Shipping Name (DOT) : Methyltetrahydrofuran  
Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120  
Packing group (DOT) : II - Medium Danger  
Hazard labels (DOT) : 3 - Flammable liquid



DOT Packaging Non Bulk (49 CFR 173.xxx) : 202  
DOT Packaging Bulk (49 CFR 173.xxx) : 242  
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 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.  
Emergency Response Guide (ERG) Number : 127  
Other information : No supplementary information available.

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### Transportation of Dangerous Goods

Not applicable

### Transport by sea

Transport document description (IMDG) : UN 2536 METHYLTETRAHYDROFURAN, 3, II (-11°C o.c.)  
UN-No. (IMDG) : 2536  
Proper Shipping Name (IMDG) : METHYLTETRAHYDROFURAN  
Class (IMDG) : 3 - Flammable liquids  
Packing group (IMDG) : II - substances presenting medium danger  
Limited quantities (IMDG) : 1 L

### Air transport

Transport document description (IATA) : UN 2536 Methyltetrahydrofuran, 3, II  
UN-No. (IATA) : 2536  
Proper Shipping Name (IATA) : Methyltetrahydrofuran  
Class (IATA) : 3 - Flammable Liquids  
Packing group (IATA) : II - Medium danger

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### 2-Methyl Tetrahydrofuran (96-47-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

#### CANADA

#### 2-Methyl Tetrahydrofuran (96-47-9)

Listed on the Canadian NDSL (Non-Domestic Substances List)

### EU-Regulations

#### National regulations

No additional information available

### 15.3. US State regulations

#### 2-Methyl Tetrahydrofuran (96-47-9)

State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
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## SECTION 16: Other information

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#### 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 : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS US (GHS HazCom 2012)

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