

# THCN

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Issue date: 2021-09-01

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Version: 1.0

### SECTION 1: Identification

#### 1.1. Product identifier

Product form : Mixture  
Product name : THCN

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use : Delta-9-Tetrahydrocannabinol calibration solution CRM, for laboratory use only

#### 1.3. Details of the supplier of the safety data sheet

National Research Council Canada  
1200 Montreal Road  
Ottawa, K1A 0R6 – Canada  
T 613-993-2359



National Research  
Council Canada

Conseil national de  
recherches Canada

#### 1.4. Emergency telephone number

Emergency number : 1-888-CANUTEC

### SECTION 2: Hazards identification

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

##### GHS classification

Flammable Liquid 2  
Acute Toxicity 3 (Oral)  
Acute Toxicity 3 (Inhalation:vapour)  
Eye Irritation. 2A  
Reproductive Toxicity 1B  
Specific Target Organ Toxicity (Single Exposure) 1  
Specific Target Organ Toxicity (Single Exposure) 3

#### 2.2. Label elements

##### GHS labelling

Hazard pictograms (GHS) :



GHS02



GHS06



GHS07



GHS08

Signal word (GHS) :

Danger

Hazard statements (GHS) :

Highly flammable liquid and vapour. Toxic if swallowed or if inhaled. Causes serious eye irritation. May cause drowsiness or dizziness. May damage fertility or the unborn child. Causes damage to organs.

Precautionary statements (GHS) :

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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. Do not breathe dust/fume/gas/mist/vapours/spray. Wash hands, forearms and face thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. If exposed or concerned: Call a poison center or doctor. If swallowed: Immediately call a

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poison center or doctor. Rinse mouth. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a poison center or doctor if you feel unwell. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor. IF IN EYES: 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. Store in a well-ventilated place. Keep cool. Store locked up. 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

No additional information available

### 2.4. Unknown acute toxicity (GHS)

0.1% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	% (by weight)
Methanol	(CAS-No.) 67-56-1	99.9
1-trans-.delta.-9-Tetrahydrocannabinol	(CAS-No.) 1972-08-3	0.1

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures after inhalation : If inhaled: Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a POISON CENTER/doctor.
- First-aid measures after skin contact : If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash clothing before re-using. Get medical attention if irritation develops and persists.
- First-aid measures after eye contact : IF IN EYES: 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 : IF SWALLOWED: Rinse mouth. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Immediately call a POISON CENTER/doctor.

### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/effects : Causes damage to organs.
- Symptoms/effects after inhalation : Toxic if inhaled. May cause irritation to the respiratory tract. May cause drowsiness or dizziness.
- Symptoms/effects after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
- Symptoms/effects after eye contact : Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
- Symptoms/effects after ingestion : Toxic if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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Chronic symptoms : May damage fertility or the unborn child.

### 4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO<sub>2</sub>), dry chemical powder, foam.  
Unsuitable extinguishing media : Do not use water jet.

### 5.2. Special hazards arising from the substance or mixture

No additional information available

Fire hazard : Highly flammable liquid and vapour. Products of combustion may include, and are not limited to: oxides of carbon.  
Explosion hazard : May form flammable/explosive vapour-air mixture. Vapours are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapours.

### 5.3. Advice for firefighters

Firefighting instructions : Move containers away from the fire area if this can be done without risk. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.  
Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

## SECTION 6: Accidental release measures

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

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Use special care to avoid static electric charges. Remove all sources of ignition.

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

For containment : Stop leak if safe to do so. Remove all sources of ignition. Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.  
Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

### 6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.  
Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapours/spray. Do not swallow. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Handle and open container with care.

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Hygiene measures : Take off immediately all contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Wash hands, forearms and face thoroughly after handling.

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

Technical measures : Proper grounding procedures to avoid static electricity should be followed.  
Storage conditions : Keep out of the reach of children. Store locked up. Keep in fireproof place. Keep away from heat and direct sunlight. Keep away from clothing and other combustible materials. Keep away from food, drink and animal feedingstuffs. Store tightly closed in a dry, cool and well-ventilated place.  
Storage temperature : -20 °C

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

<b>Methanol (67-56-1)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH OEL TWA [ppm]	200 ppm
ACGIH OEL STEL [ppm]	250 ppm
ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route
<b>USA - ACGIH - Biological Exposure Indices</b>	
BEI	15 mg/L Parameter: Methanol - Medium: urine - Sampling time: end of shift (background, nonspecific)
<b>USA - OSHA - Occupational Exposure Limits</b>	
OSHA PEL TWA [1]	260 mg/m <sup>3</sup>
OSHA PEL TWA [2]	200 ppm
<b>USA - IDLH - Occupational Exposure Limits</b>	
IDLH [ppm]	6000 ppm
<b>USA - NIOSH - Occupational Exposure Limits</b>	
NIOSH REL TWA	260 mg/m <sup>3</sup>
NIOSH REL TWA [ppm]	200 ppm
NIOSH REL STEL	325 mg/m <sup>3</sup>
NIOSH REL STEL [ppm]	250 ppm
US-NIOSH chemical category	Potential for dermal absorption

<b>1-trans-.delta.-9-Tetrahydrocannabinol (1972-08-3)</b>	
ACGIH	Not applicable
OSHA	Not applicable
IDLH	Not applicable
NIOSH	Not applicable

### 8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station. Provide readily accessible eye wash stations and safety showers.  
Hand protection : Wear suitable gloves.  
Eye protection : Wear eye/face protection.  
Skin and body protection : Wear suitable protective clothing.

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Respiratory protection	: Wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Environmental exposure controls	: Avoid release to the environment.
Other information	: Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

### SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Appearance	: No data available
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Highly flammable liquid and vapour.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

#### 10.2. Chemical stability

Stable under normal conditions. May form flammable/explosive vapour-air mixture.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

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

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### 10.5. Incompatible materials

Strong oxidizing agents. Strong reducing agents. Strong acids. Alkali metals. Acid chlorides. Acid anhydrides. Phosphorus.

### 10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. May release flammable gases.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

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

ATE CA (oral)	100.1 mg/kg bodyweight
ATE CA (vapours)	3.003 mg/L/4h
Unknown acute toxicity (GHS CA)	0.1% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))

#### Methanol (67-56-1)

LD50 oral rat	1187 – 2769 mg/kg bodyweight Animal: rat
LD50 dermal rabbit	15840 mg/kg
LC50 inhalation rat	22500 ppm (Exposure time: 8 h)

#### 1-trans-.delta.-9-Tetrahydrocannabinol (1972-08-3)

LD50 oral rat	666 mg/kg
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Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: May damage fertility or the unborn child.
STOT-single exposure	: Causes damage to organs. May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: Toxic if inhaled. May cause irritation to the respiratory tract. May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/effects after eye contact	: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/effects after ingestion	: Toxic if swallowed. May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic symptoms	: May damage fertility or the unborn child. Causes damage to organs.
Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: May cause long-term adverse effects in the aquatic environment.
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Methanol (67-56-1)	
LC50 - Fish [1]	15400 mg/L Test organisms (species): <i>Lepomis macrochirus</i>
LC50 - Fish [2]	> 100 mg/L (Exposure time: 96 h - Species: <i>Pimephales promelas</i> [static])
NOEC (chronic)	208 mg/L Test organisms (species): <i>Daphnia magna</i> Duration: '21 d'

### 12.2. Persistence and degradability

THCN	
Persistence and degradability	Not established

### 12.3. Bioaccumulative potential

THCN	
Bioaccumulative potential	Not established

Methanol (67-56-1)	
BCF - Fish [1]	< 10
Partition coefficient n-octanol/water	-0.77

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

- Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. The generation of waste should be avoided or minimized wherever possible.
- Additional information : Handle empty containers with care because residual vapours are flammable.

## SECTION 14: Transport information

### Department of Transportation (DOT) and Transportation of Dangerous Goods (TDG)

In accordance with DOT/TDG

- UN-No.(DOT/TDG) : UN1230
- Proper Shipping Name (DOT/TDG) : Methanol Solution
- Class (DOT/TDG) : 3
- Hazard labels (DOT/TDG) :



- Packing group (DOT/TDG) : II

### Additional information

- Other information : No supplementary information available.
- Special transport precautions : Do not handle until all safety precautions have been read and understood.



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### SECTION 15: Regulatory information

#### 15.1. Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

1-trans-.delta.-9-Tetrahydrocannabinol	CAS-No. 1972-08-3
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All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories except for:

1-trans-.delta.-9-Tetrahydrocannabinol	CAS-No. 1972-08-3
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#### Methanol (67-56-1)

Subject to reporting requirements of United States SARA Section 313

CERCLA RQ	5000 lb
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SARA Section 313 - Emission Reporting	1 %
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#### 15.2 US State regulations

No additional information available

### SECTION 16: Other information

Issue date	: 2021-09-01
Revision date	: 2021-09-01
Other information	: None
Version #	: 1.0
Prepared by	: Nexreg Compliance Inc.

#### **DISCLAIMER:**

*The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.*

*This material is for research and experimental applications only. It is not intended for food, drug, household, agricultural, or cosmetic use. Its use must be supervised by technically qualified individuals with experience in the handling of potentially hazardous chemicals. Apart from the solvent in this product (if applicable), the hazardous components present in the solution are at such low concentrations that exact determination of degree of hazard is not warranted and would be misleading. We shall not be held liable for any damage resulting from handling or from contact with the above product.*