

THCA-1

Safety Data Sheet

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

Issue date: 2022-06-30

Revision date: 2022-06-30

Version: 1.0

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture
Product name : THCA-1
Product code : Not Available

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

Use of the substance/mixture : Tetrahydrocannabinolic acid 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 : CANUTEC 1-613-996-6666

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS classification

Flammable Liquid 2
Acute Toxicity 3 (Oral)
Acute Toxicity 4 (Dermal)
Acute Toxicity 3 (Inhalation:vapour)
Eye Irritant 2A

2.2. Label elements

GHS labelling

Hazard pictograms (GHS) :



GHS02



GHS06



GHS07

Signal word (GHS) : Danger

Hazard statements (GHS) : Highly flammable liquid and vapour. Toxic if swallowed or if inhaled. Harmful in contact with skin. Causes serious eye irritation.

Precautionary statements (GHS) : 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. Avoid breathing 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 swallowed: Immediately call a poison center or doctor. Rinse mouth. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. 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

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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)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	% (by weight)
Acetonitrile	(CAS-No.) 75-05-8	99.9
Tetrahydrocannabinolic acid	(CAS-No.) 23978-85-0	0.1

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.
- 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. Call a poison center or a doctor if you feel unwell.
- 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: Immediately call a POISON CENTER/doctor. Rinse mouth. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

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

- Symptoms/effects after inhalation : Toxic if inhaled. May cause irritation to the respiratory tract.
- Symptoms/effects after skin contact : Harmful in contact with skin. May cause skin irritation. Symptoms may include redness, edema, 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.

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).

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SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : Do not use water jet.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Highly flammable liquid and vapour. Products of combustion may include, and are not limited to: oxides of carbon. Irritating vapours.
- Explosion hazard : May form flammable/explosive vapour-air mixture.

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.
- 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 : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid contact with skin, eyes and clothing. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not swallow. When using do not eat, drink or smoke. Handle and open container with care. Use only outdoors or in a well-ventilated area.
- Hygiene measures : Take off immediately all contaminated clothing and wash it before reuse. 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. Keep container tightly closed. Store in a dry, cool and well-ventilated place. Store locked up.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Acetonitrile (75-05-8)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	20 ppm
ACGIH chemical category	Not Classifiable as a Human Carcinogen, Skin - potential significant contribution to overall exposure by the cutaneous route
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA [1]	70 mg/m ³
OSHA PEL TWA [2]	40 ppm
USA - IDLH - Occupational Exposure Limits	
IDLH [ppm]	137 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	34 mg/m ³
NIOSH REL TWA [ppm]	20 ppm

Tetrahydrocannabinolic acid (23978-85-0)	
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 resistant to chemical penetration.
Eye protection	: Wear eye/face protection.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, 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

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Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability	: 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
No data availableViscosity, 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.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Toxic if swallowed.
Acute toxicity (dermal)	: Harmful in contact with skin.
Acute toxicity (inhalation)	: Toxic if inhaled.

ATE CA (oral)	160.16 mg/kg bodyweight
ATE CA (Dermal)	1101.101 mg/kg bodyweight
ATE CA (vapours)	3.003 mg/L/4h

Acetonitrile (75-05-8)

LD50 oral rat	160 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

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Acetonitrile (75-05-8)

LC50 inhalation rat	26.8 mg/L/4h
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Skin corrosion/irritation	: Based on available data, the classification criteria are not met.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Based on available data, the classification criteria are not met.
Reproductive toxicity	: Based on available data, the classification criteria are not met.
STOT-single exposure	: Based on available data, the classification criteria are not met.
STOT-repeated exposure	: Based on available data, the classification criteria are not met.

Acetonitrile (75-05-8)

NOAEC (inhalation, rat, gas, 90 days)	400 ppm Animal: rat, Guideline: other:
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Aspiration hazard	: Based on available data, the classification criteria are not met.
Symptoms/effects after inhalation	: Toxic if inhaled. May cause irritation to the respiratory tract.
Symptoms/effects after skin contact	: Harmful in contact with skin. May cause skin irritation. Symptoms may include redness, edema, 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.
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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Acetonitrile (75-05-8)

LC50 - Fish [1]	1600 – 1690 mg/L (Exposure time: 96 h - Species: <i>Pimephales promelas</i> [flow-through])
EC50 - Crustacea [1]	> 1000 mg/L Test organisms (species): <i>Daphnia magna</i>
LC50 - Fish [2]	1000 mg/L (Exposure time: 96 h - Species: <i>Pimephales promelas</i> [static])
LOEC (chronic)	> 960 mg/L Test organisms (species): <i>Daphnia magna</i> Duration: '21 d'
NOEC (chronic)	960 mg/L Test organisms (species): <i>Daphnia magna</i> Duration: '21 d'
NOEC chronic fish	102 mg/L Test organisms (species): <i>Oryzias latipes</i> Duration: '21 d'

12.2. Persistence and degradability

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Persistence and degradability	Not established.
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12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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Acetonitrile (75-05-8)

Partition coefficient n-octanol/water	-0.34
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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.
- 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) : UN1992
- Proper Shipping Name (DOT/TDG) : Flammable liquids, toxic, n.o.s. (Acetonitrile)
- 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.

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, except for:

Acetonitrile	CAS-No. 75-05-8
Tetrahydrocannabinolic acid	CAS-No. 23978-85-0

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:

Tetrahydrocannabinolic acid	CAS-No. 23978-85-0
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Acetonitrile (75-05-8)

Subject to reporting requirements of United States SARA Section 313

CERCLA RQ	5000 lb
SARA Section 313 - Emission Reporting	1 %

15.2 US State regulations

No additional information available

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SECTION 16: Other information

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Revision date	: 2022-06-30
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.

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