



SAFETY DATA SHEET

Preparation Date: 12/10/2014 Product identifier Revision Date: Not Applicable

Revision Number: Not Applicable

Product code: Product Name: T1592 Tetrahydrofurfuryl Propionate

Other means of identification

Synonyms: CAS #: RTECS # CI#: Propionic Acid Tetrahydrofurfuryl Ester 637-65-0 Not available Not available

Recommended use of the chemical and restrictions on use

Recommended use: Uses advised against	No information available. No information available
Supplier:	Spectrum Chemical Mfg. Corp 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000
Order Online At:	https://www.spectrumchemical.com
Emergency telephone number	Chemtrec 1-800-424-9300
Contact Person:	Martin LaBenz (West Coast)
Contact Person:	Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Category 4

Label elements

Warning

Combustible liquid

Hazards not otherwise classified (HNOC) Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking Wear protective gloves/protective clothing/eye protection/face protection

In case of fire: Use CO2, dry chemical, or foam to extinguish.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %	Trade Secret
Tetrahydrofurfuryl Propionate	637-65-0	100	*
637-65-0			

4. FIRST AID MEASURES

First aid measures General Advice:	Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126)
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops. Consult a physician if necessary.
Eye Contact:	Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.
Most important symptoms and ef	fects, both acute and delayed
Symptoms	Health injuries are not known or expected under normal use

Symptoms Health injuries are not known or expected under normal use.

Indication of any immediate medical attention and special treatment needed Notes to Physician: Treat symptomatically

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Extinguishing Media Suitable Extinguishing Media:

Carbon dioxide (CO2). Dry chemical. Water spray. Alcoholresistant foam.

Unsuitable Extinguishing Media:

Do not use a solid (straight) water stream as it may scatter and spread fire.

Specific hazards arising from the chemical	
Hazardous Combustion Products:	Carbon oxides
Specific hazards:	Flammable May be ignited by heat, sparks or flames Container explosion may occur under fire conditions or when heated Vapor may travel considerable distance to source of ignition and flash back Vapours may form explosive mixtures with air. Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks)
Special Protective Actions for Firefighters	
Specific Methods:	Water mist may be used to cool closed containers. For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out. Dike fire-control water for later disposal; do not scatter the material.
Special Protective Equipment for Firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent)

6. ACCIDENTAL RELEASE MEASURES

and full protective gear

Personal precautions, protective equipment and emergency procedures

Personal Precautions:	Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed spaces.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.
Methods and material for conta	ainment and cleaning up
Methods for containment	Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth). In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.
Methods for cleaning up	Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Use only non-sparking tools. Clean contaminated surface thoroughly.
	7 HANDLING AND STORAGE

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials.

Safe Handling Advice:

Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Keep away from heat and sources of ignition. Store in a segrated and approved area. Store away from incompatible materials.

Incompatible Materials:

Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Tetrahydrofurfuryl Propionate	None	None	None	None
637-65-0				

Canada

Components	Alberta	British Columbia	Ontario	Quebec
Tetrahydrofurfuryl Propionate	None	None	None	None
637-65-0				

Australia and Mexico

Components	Australia	Mexico
Tetrahydrofurfuryl Propionate	None	None
637-65-0		

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection:	Goggles. Safety glasses with side-shields.
Skin and body protection:	Long sleeved clothing. Chemical resistant apron. Gloves.
Respiratory protection:	Vapor respirator. Be sure to use an approved/certified respirator or equivalent.
Hygiene measures:	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using do not smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

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Physical state: Liquid

Odor: No information available

Formula: C8H14O3

Flashpoint (°C/°F): 92°C/198°F

Upper Explosion Limit (%): No information available

Melting point/range(°C/°F): No information available

Bulk density: No information available

Density (g/cm3): 1.04

VOC content (g/L): No information available

Viscosity: No information available Appearance: Liquid.

Taste No information available

Flammability: No information available

Flash Point Tested according to: Not available

Autoignition Temperature (°C/°F): No information available

Boiling point/range(°C/°F): 205°C/401°F

Specific gravity: No information available

Evaporation rate: No information available

Odor threshold (ppm): No information available

Miscibility: No information available

10. STABILITY AND REACTIVITY

Color: Colorless.

Molecular/Formula weight: 158.20

Flash point (°C): No data available

Lower Explosion Limit (%): No information available

pH: No information available

Decomposition temperature(°C/°F): No information available

Vapor pressure @ 20°C (kPa): No information available

Vapor density: No information available

Partition coefficient (n-octanol/water): No information available

Solubility: No information available

Reactivity Reactive with oxidizing agents

Chemical stability Stability:	Stable under recommended storage conditions
Possibility of Hazardous Reactions:	In use, may form flammable/explosive vapor-air mixture
Conditions to avoid:	Heat. Ignition sources. Incompatible materials.
Incompatible Materials:	Strong oxidizing agents.
Hazardous decomposition products:	Carbon oxides.
Other Information	

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure: Eyes. Ingestion. Inhalation.

Acute Toxicity

Component Information

Tetrahydrofurfuryl Propionate - 637-65-0

LD50/oral/rat = No information available LD50/oral/mouse = No information available LD50/dermal/rat = No information available LD50/dermal/rabbit = No information available LC50/inhalation/rat = No information available LC50/inhalation/mouse = No infomation available Other LD50 or LC50information = No information available

Product Information

LD50/oral/rat = VALUE- Acute Tox Oral = No information available

LD50/oral/mouse = Value - Acute Tox Oral = No information available

LD50/dermal/rabbit VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat VALUE-Vapor = No information available VALUE-Gas = No information available VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available VALUE - Gas = No information available VALUE - Dust/Mist = No information available

Symptoms

Skin Contact:	May cause skin irritation.
Eye Contact:	May cause eye irritation.
Inhalation Ingestion	May cause irritation of respiratory tract. Health injuries are not known or expected under normal use.
Aspiration hazard	No information available
Delayed and immediate effects as	well as chronic effects from short and long-term exposure
Chronic Toxicity	No information available
Sensitization:	No information available
Mutagenic Effects:	No information available
Product code: T1592	Product name: Tetrahydrofurfuryl

Carcinogenic effects:

Not considered carcinogenic

Components	ACGIH - Carcinogens	IARC	NTP	OSHA HCS - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
Tetrahydrofurfuryl Propionate	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

Reproductive toxicity	No data is available
Reproductive Effects:	No information available
Developmental Effects:	No information available
Teratogenic Effects:	No information available
Specific Target Organ Toxicity	
STOT - single exposure	No information available
STOT - repeated exposure	No information available
Target Organs:	No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects:	No data available.
Persistence and degradability:	No information available
Bioaccumulative potential:	No information available
Mobility:	No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Tetrahydrofurfuryl Propionate	None	None	None	None

14. TRANSPORT INFORMATION

DOT

14. TRANSPORT INFORMATION

UN-No:	Not Regulated
Proper Shipping Name:	No information
Hazard Class:	No information
Subsidiary Risk:	No information
Packing Group:	None
ERG No:	No information
Marine Pollutant	No data availat
DOT RQ (lbs):	No information
. ,	

TDG (Canada)

UN-No: **Proper Shipping Name:** Hazard Class: Subsidiary Risk: Packing Group: **Description:**

ADR

UN-No:	Not Regulated
Proper Shipping Name:	No information availa
Hazard Class:	No information availa
Packing Group:	No information availa
Subsidiary Risk:	No information availa
Classification Code:	No information availa
Description:	No information availa
CEFIC Tremcard No:	No information availa

IMO / IMDG

UN-No:
Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
Description:
IMDG Page:
Marine Pollutant
MFAG:
Maximum Quantity:

RID

UN-No: **Proper Shipping Name:** Hazard Class: Subsidiary Risk: Packing Group: **Classification Code: Description:**

ICAO

UN-No: **Proper Shipping Name:** Hazard Class: Subsidiary Risk: Packing Group: **Description:**

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Not Regulated No information available No information available No information available No information available No information available

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Not Regulated

No information available No information available

Not Regulated

No information available No information available

Not Regulated

No information available available available available available available

ΙΑΤΑ

UN-No: Not Reg	Julated
Proper Shipping Name: No infor	mation
Hazard Class: No infor	mation
Subsidiary Risk: No infor	mation
Packing Group: No infor	mation
Description: No infor	mation

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Tetrahydrofurfuryl Propionate	Present	Not present	Not present	Not present	Present	Present	Present 211-297-3

U.S. Regulations

Tetrahydrofurfuryl PropionateFDA - Direct Food Additives21 CFR 172.515FDA - 21 CFR - Total Food Additives172.515

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Tetrahydrofurfuryl Propionate	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

•	Substances and their	Section 302 Extremely Hazardous Substances and TPQs	Hazardous	Chemical Category	Section 313 - Reporting de minimis
Tetrahydrofurfuryl Propionate	None	None	None	None	None

U.S. TSCA

•	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Tetrahydrofurfuryl Propionate	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

B2 Flammable liquid

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

Components	Canada (DSL)	Canada (NDSL)
Tetrahydrofurfuryl Propionate	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Manditory	
		Reporting	
Tetrahydrofurfuryl Propionate	Not listed	Not listed	

EU Classification

R-phrase(s)

not determined (not applicable)

S -phrase(s) none

Components	Classification	Concentration Limits:	Safety Phrases
Tetrahydrofurfuryl Propionate		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger: None.

16. OTHER INFORMATION

16. OTHER INFORMATION

Preparation Date: Revision Date: Prepared by:

Disclaimer:

12/10/2014 Not Applicable Sonia Owen

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet