G.J. CHEMICAL COMPANY, INC. SAFETY DATA SHEET

1. PRODUCT IDENTIFIER

1.1 PRODUCT NAME:----------> METHYLTETRAHYDROFURAN
PRODUCT NUMBER(S):--------> 199490

TRADE NAMES/SYNONYMS:-> METHF, Furan, 2-Methyltetrahydrofuran
Tetrahydrosilvan

CAS-No: 96-47-9 CHEMICAL FAMILY: Furan

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST
RECOMMENDED USE: Industrial; Solvent in chemical synthesis, Solvent recovery, Manufacture of substances. Laboratory chemicals.
USES ADVISED AGAINST: No information available

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET
Company: G.J. CHEMICAL CO., INC.
Address: 40 VERONICA AVENUE
SOMERSET, NJ 08873
Telephone: 1-973-589-1450
Fax: 1-973-589-3072

1.4 Emergency Telephone Number
Emergency Phone: 1-800-424-9300 (CHEMTREC)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29CFR 1910 (OSHA HCS)
Flammable liquids (Category 2), H225
Acute toxicity, Oral (Category 4), H302
Skin irritation (Category 2), H315
Serious eye damage (Category 1), H318

2.2 GHS Label elements, including precautionary statements

Pictogram

GHS02 GHS05 GHS07

Signal word: DANGER

Hazard statement(s)
H225 Highly flammable liquid and vapor.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.

Precautionary statement(s)
Prevention:
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
Storage:
P403 + P235 Store in a well-ventilated place. Keep cool.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS: None

3. INGREDIENTS

3.1 SUBSTANCE:

Ingredient	CAS No.	% by WT. Range	CLASSIFICATION
Methyltetrahydrofuran	96-47-9	99.9	Flammable liquids (Category 2), H225
	EC-No.202-507-4		Acute toxicity, Oral (Category 4), H302
	Reg.-No. 01-2119968920-28-XXXX		Skin irritation (Category 2), H315
			Serious eye damage (Category 1), H318
Antioxidant BHT	128-37-0	.025-.040	Acute aquatic toxicity (Category 1), H400
	EC-No.204-881-4		Chronic aquatic toxicity (Category 1), H410
	Reg.-No. 01-2119555270- 46-XXXX		

3.2 MIXTURE: Not applicable.

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:

INHALATION: Methyltetrahydrofuran

****_FIRST AID_- Remove from exposure area to fresh air immediately. If breathing is difficult give oxygen. If breathing has stopped, perform artificial respiration. Keep person warm and at rest. Treat symptomatically and supportively. Get medical attention immediately.**

SKIN CONTACT: Methyltetrahydrofuran

****_FIRST AID_- Remove contaminated clothing and shoes immediately. Wash affected area with soap or mild detergent and large amounts or water until no evidence of chemical remains (approximately 15-20 minutes). Get medical attention immediately.**

EYE CONTACT: Methyltetrahydrofuran

****_FIRST AID_- Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains (approximately 15-20 minutes). Remove contact lenses, if worn, after initial flush. Get medical attention immediately.**

INGESTION: Methyltetrahydrofuran

****_FIRST AID_- Do not induce vomiting. Never give anything by mouth to an unconscious person. If even minor quantity swallowed give luke-warm water. Get medical attention immediately and treat symptomatically.**

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:
Eye: Severe irritation, eye damage may be permanent;
Skin: Moderately irritating;
Inhalation: Irritation of the respiratory tract or temporary acute nervous system depression characterized by headache, dizziness, staggering gait, confusion, unconsciousness or coma. METHF is an anesthetic agent in high concentrations.
Ingestion: Irritates the gastrointestinal tract; Symptoms may include nausea, vomiting and diarrhea. May cause sore throat and abdominal pain. May cause liver or kidney injury.
Chronic: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.
Typical symptoms are cardiovascular disorders, sweetish taste in the mouth, nausea, vomiting, loss of appetite, strong thirst, burning of eyes and bleeding from the nose. Damage may occur to the kidney or liver.
Medical Conditions Aggravated by Exposure: Skin contact may aggravate an existing dermatitis. This material or its emissions may aggravate Pulmonary/Bronchial disease and/or cause breathing difficulty.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:
Notes to Physician: Following Gastric emptying either by induced vomiting or Gastric lavage, administer an aqueous slurry of activated charcoal followed by a cathartic.

5. FIRE FIGHTING MEASURES

Flash Point: -10°C (14.0°F) TCC **LEL %: 1.2 (V)**
Auto-ignition Temp.: 260°C (500°F) **UEL %: 5.7 (V)**
UNIFORM FIRE CODE: Flammable Liquid Class 1B

5.1 SUITABLE EXTINGUISHING MEDIA: x CO_2--> x Dry Chemical--> x Water-fog--> x Other-->

Unsuitable extinguishing media: Do not use waterjet.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE: FIRE AND EXPLOSION HAZARD: DANGEROUS FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK. VAPOR-AIR MIXTURES ARE EXPLOSIVE. Extremely Flammable;

Five percent METHF in water is flammable. Releases Flammable Vapors below normal ambient temperatures when mixed with air and exposed to an ignition source, vapors can burn in the open or explode if confined. Diluting with water may not suffice to raise Flash Point above ambient temperatures. Keep containers tightly closed. Isolate from all sources of ignition. To avoid explosion, METHF should never be distilled to dryness.

CONDITIONS OF FLAMMABILITY: Flammable in the presence of a source of ignition when the temperature is above the flash point.

HAZARDOUS COMBUSTION PRODUCTS: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, carbon oxides and other unidentified organic compounds evolve when this material undergoes combustion.

5.3 ADVICE FOR FIREFIGHTERS: Shut off source. Keep unnecessary people away; isolate hazard area and deny entry. Avoid breathing vapors, stay upwind. Do not enter fire area without structural fire fighter's protective equipment including NIOSH/MSHA approved self-contained breathing apparatus (SCBA) in positive pressure mode. Use water spray to knock down vapors. Use halon, carbon dioxide extinguisher or dry powder for small fires. Large fires are best controlled by alcohol foam, fog, and water spray. Move container from fire area if you can do it without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. Stay away from ends of tanks. For massive fire in cargo area, use unmanned hose holder or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire. Isolate for 1/2 mile in all directions if tank, rail car or tank truck is involved in fire (1990 Emergency Response Guidebook, DOT P 1800.5, guide page 26). Extinguish only if fire can be stopped. Use flooding amounts of water as a fog; solid streams may be ineffective. Water fog may be used to cool closed containers to prevent pressure build up and possible auto ignition or explosion when exposed to extreme heat. Cool containers with water-fog from as far a distance as possible. Avoid breathing vapors; keep upwind. If fire is uncontrollable or containers are exposed to direct flame, water may be ineffective (NFPA 325M, Fire Hazard Properties of Flammable Liquids, Gases, and Volatile Solids, 1991). Fire fighters should wear full protective clothing and NIOSH/MSHA approved self-contained breathing apparatus (SCBA) with full face-piece operated in the pressure demand or other positive pressure mode. Water may be used to flush spills away from exposures and to dilute spills to non-flammable mixtures.**

Do Not Use: Water in straight hose stream will scatter and spread fire and should not be used. It may not be practical to extinguish fire by water dilution.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Extremely Flammable Liquid; Eliminate ignition sources in the vicinity of the spill or released vapor. Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations.

6.2 ENVIRONMENTAL PRECAUTIONS:
Keep out of water sources, drains and sewers. Do not flush into surface water or sanitary sewer system.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:
Methods for cleanup and containment:
Use explosion proof equipment. Shut off valves, contain spill, keep out of water sources and sewers, for smaller spills add non-flammable absorbent such as clay or silica in spill area. If an odor or acidity problem exists, add lime or sodium bicarbonate. For large spills use foam on spill to minimize vapors clean up by vacuuming then using non-flammable absorbent. Remove contaminated soil to remove contaminated trace residues.
Methods for disposal:
Place all saturated absorbent, using non-sparking tools, in an approved container for disposal. Flush with water to remove trace reside. Minimize breathing vapors and skin contact, ventilate confined areas, open all windows and doors, assure conformity with applicable government regulations. Keep all nonessential people away. Caution: Spontaneous polymerization can occur if material is released or mixed with incompatibles.

6.4 REFERENCE TO OTHER SECTIONS: See Sections 8 and 13.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING: This material presents a fire hazard. Invisible vapor spreads easily and can be set on fire by many sources, such as pilot lights, welding equipment, and electrical motors and switches. Vapor is heavier than air and can travel considerable distance to a source of ignition and flash back. Avoid breathing vapors in top of shipping container. Use with adequate ventilation. Avoid prolonged or repeated contact with eyes, skin and clothing. Do not take internally. Avoid work practices that may release volatile

components in the atmosphere. Avoid contaminating soil or releasing material into sewage and drainage systems. Use non-sparking tools to open or close containers. Vapor space above liquid may be flammable/explosive unless blanketed with inert gas.

Advice on general occupational hygiene:
Wash hands before breaks and after work. Keep away from food, drink and animal feeding stuffs. When using do not smoke.

STATIC HAZARD: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not be sufficient. For more information refer to OSHA Standard 29CFR 1910.106 "Flammable and Combustible Liquids" and National Fire Protection Association (NFPA 77) "Recommended Practice on Static Electricity".

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Follow maximum allowed pile heights specified in the BOCA codes or the NFPA manual. Local fire authorities should be notified for storage of this material in any quantity. Local permits are required for storage in warehouse quantities. Recommended storage temperature: 15 - 25°C. Store large quantities only in cool, dry areas in buildings designed to comply with OSHA 1910.106. Store in closed containers away from direct sunlight. Keep containers tight and upright to prevent leakage. Do not store with incompatible materials. Keep containers closed when not in use. Under proper storage conditions a storage stability of 1 year is expected at ambient temperature. Storage class (TRGS 510): 3: Flammable liquids

CONTAINER WARNINGS: Containers should be Bonded and Grounded when pouring. Avoid free fall of liquid in excess of a few inches. Empty containers release residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, or expose such containers to heat, sparks, static electricity or other sources of ignition. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum re-conditioner.

DECONTAMINATION PROCEDURES: Isolate, vent, drain, wash and purge systems or equipment before maintenance or repair. Remove all ignition sources. Check atmosphere for explosiveness and oxygen deficiencies. Use adequate personal protective equipment. Observe precautions pertaining to confined space entry.

7.3 SPECIFIC END USES: Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROL (PERSONAL PROTECTION)

8.1 CONTROL PARAMETERS:

Ingredient	CAS No.	% by WT. Range	Exposure Limits
Methyltetrahydrofuran	96-47-9 EC-No.202-507-4 Reg.-No. 01-2119968920-28-XXXX	99.9	N.E.
Antioxidant BHT	128-37-0 EC-No.204-881-4 Reg.-No. 01-2119555270- 46-XXXX	.025- .040	2mg/m3 TWA (ACGIH) 10mg/m3 TWA (OSHA) 10mg/m3 TWA (NIOSH)

Key: (PEL) = Permissible Exposure Limit OSHA
(TLV) = Threshold Limit Value OSHA & ACGIH
(STEL) = Short Term Exposure Limit ACGIH
(WEEL) = USA. Workplace Environmental Exposure Levels
(TWA) = Time Weighted Average
CAS = Chemical Abstracts Registry Number
IDLH = Immediate Danger to Life and Health
N.E. =None Established

8.2 EXPOSURE CONTROLS

EXPOSURE GUIDELINES: Consider the potential hazards of this material (Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended.

ENGINEERING CONTROLS: Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits. All areas should be ventilated in accordance with OSHA Regulation 29 CFR Part 1910. Explosion proof motors should be used in mechanical ventilation.

RESPIRATORY PROTECTION: The specific respirator selected must be based on contamination levels found in the work place, must not exceed the working limits of the respirator and be jointly approved by the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration (NIOSH-MSHA):

For vapor concentrations up to 200ppm an air purifying NIOSH/MSHA Approved

respirator with full face-piece and organic vapor cartridges. For concentrations over 200ppm or in confined areas use a NIOSH/MSHA approved positive pressure full face-piece supplied air respirator.

BODY CLOTHING: Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged contact with this substance. Use chemical resistant apron or other impervious clothing. Remove and wash contaminated clothing before reuse.

SKIN PROTECTION: Employee must wear appropriate protective gloves to prevent contact with this substance.
Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 10 min

HYGIENE: Use good personal hygiene practices, wash hands before eating, drinking, smoking or using toilet facilities.

EYE/FACE PROTECTION: Use safety eyewear with splash-guards or face shield. Contact lenses should not be worn.
Emergency eyewash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

Methyltetrahydrofuran 96-47-9

APPEARANCE:	**Clear liquid**
COLOR:	**Colorless**
ODOR:	**Ether-like odor.**
ODOR THRESHOLD:	**No data available**
pH:	**approx. 7**
MOLECULAR WEIGHT:	**86.13 amu**
MELTING POINT:	**-20°C (-4.0 °F)**
BOILING POINT:	**78 - 80°C (172 - 176°F)**
SPECIFIC GRAVITY:	**0.7899**
DENSITY (25°C):	**0.86 g/ml @25°C**
VAPOR PRESSURE:	**No data available**
VAPOR DENSITY:	**2.5**
WATER SOLUBILITY:	**140g/L @ 25°C (77°F) soluble**
PARTITION COEFFICIENT N-OCTANOL/WATER	**log Pow: 1.260**
FLASH POINT:	**-10°C (14.0°F) - closed cup**

EVAPORATION RATE (BUTYL ACETATE=1): No data available
UPPER FLAMMABILITY LIMIT: 5.7% (V)
LOWER FLAMMABILITY LIMIT: 1.2% (V)
AUTO INGNITION TEMPERATURE: 260°C (500°F)
DECOMPOSITION TEMPERATURE: No data available
VISCOSITY: No data available
EXPLOSIVE PROPERTIES: No data available
OXIDIZING PROPERTIES: No data available

9.2 OTHER INFORMATION: No data available

10. STABILITY AND REACTIVITY INFORMATION

10.1 REACTIVITY: No data available.

10.2 CHEMICAL STABILITY: Unstable ( ) Stable (X)
This product is stable with an appropriate level of inhibitor but reactive without. Inhibitor levels should be checked on a programmed time interval to be sure that level of inhibitor is adequate. (BHT- 0.025% min.)

10.3 POSSIBILITY OF HAZARDOUS REACTIONS: Vapors may form explosive mixtures with air.

HAZARDOUS POLYMERIZATION: Polymerization has not been reported.

10.4 CONDITIONS TO AVOID: Heat, Sparks, Pilot Lights, Static Electricity, and Open Flame. Light and air.

10.5 INCOMPATIBLE MATERIALS: Strong oxidants such as liquid chlorine, oxygen, sodium hypochlorite, inorganic acids e.g. hydrochloric acid hydrogen peroxide.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: Fumes, Smoke, Carbon Monoxide, Aldehydes and other decomposition products where combustion is not complete.

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

Routes of Entry: Inhalation--> x Skin--> x Ingestion--> x Eye--> x

ACUTE HEALTH EFFECTS:

Effects of overexposure:

Eye> Severe irritation, eye damage may be permanent;

Skin> Moderately irritating;

Inhalation> Irritation of the respiratory tract or temporary acute nervous system depression characterized by headache, dizziness, staggering gait, confusion, unconsciousness or coma. METHF is an anesthetic agent in high concentrations.

Ingestion> Irritates the gastrointestinal tract.; Symptoms may include nausea, vomiting and diarrhea. May cause sore throat and abdominal pain. May cause liver or kidney injury.

Chronic: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.
Typical symptoms are cardiovascular disorders, sweetish taste in the mouth, nausea, vomiting, loss of appetite, strong thirst, burning of eyes and bleeding from the nose. Damage may occur to the kidney or liver.

Medical Conditions Aggravated by Exposure> Skin contact may aggravate an existing dermatitis. This material or its emissions may aggravate Pulmonary/Bronchial disease and/or cause breathing difficulty.

ACUTE TOXICITY:

The effects of overexposure shown in Section II are based on acute toxicity profiles. Typical values are:

Ingredient	Oral LD50 (Rat)	Skin LD50(Rabbit)	Inhalation LC50
Methyltetrahydrofuran	300mg/kg (OECD Test 420)	Rat>2000mg/kg (OECD Test 402)	6000ppm/4hr
Anti-oxidant BHT	>6000mg/kg	>2000mg/kg	

SKIN CORROSION/IRRITATION: Skin - in vitro assay Result: Irritating to skin. (OECD Test Guideline 431)

SERIOUS EYE DAMAGE/EYE IRRITATION: Eyes - In vitro study Result: Risk of serious damage to eyes. (OECD Test Guideline 437)

RESPIRATORY OR SKIN SENSITIZATION: in vivo assay – Mouse; Did not cause sensitization on laboratory animals. (OECD Test Guideline 429)

MUTAGENIC EFFECTS: reverse mutation assay S. typhimurium Result: negative

CARCINOGEN STATUS:
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

REPRODUCTIVE TOXICITY: No data available.

Specific target organ toxicity (STOT-SE) - single exposure (Globally Harmonized System): no data available
Specific target organ toxicity (STOT-RE) - repeated exposure (Globally Harmonized System): no data available.

ASPIRATION HAZARD: No data available

11.2 ADDITIONAL DATA: No data available
RTECS: LU2800000

12. ECOLOGICAL INFORMATION

12.1 AQUATIC TOXICITY:
Toxicity to Fish:
LC-50- Oncorhynchus mykiss (rainbow trout) - > 100 mg/l - 96 h semi static test (OECD Test Guideline 203)

Toxicity to Daphnia and other aquatic invertebrates:
EC-50- Daphnia magna (Water flea) - > 139 mg/l - 48 h semi static test (OECD Test Guideline 202)

Toxicity to Algae:
LC50 - Desmodesmus subspicatus (green algae) - > 104 mg/l - 72 h static test (OECD Test Guideline 201)

12.2 PERSISTANCE AND DEGRADABILITY: aerobic - Exposure time 28 d (OECD Test Guideline 301D)`

12.3 BIOACCUMULATIVE POTENTIAL: log Pow 1.26
Biological Oxygen Demand (BOD): No data available

12.4 MOBILITY IN SOIL: No data available

12.5 RESULTS OF PBT AND vPvB:
PBT assessment results: This substance is not classified as PBT or vPvB.

12.6 OTHER ADVERSE EFFECTS: No data available

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS: Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly it is the responsibility of the user to determine the proper storage, transportation, treatment and or disposal methodologies for spent materials and residues at time of disposition. Dispose in accordance with all applicable disposal regulations. Burn concentrate liquids in systems compatible with water-soluble wastes in a permitted facility. Dilute aqueous waste may biodegrade.

CONTAMINATED PACKAGING: Dispose of as unused product.

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

RCRA: The unused product is a RCRA hazardous waste if discarded. The RCRA ID number is: D001.
If the waste is a spent solvent, the appropriate spent solvent code should be used.
DISPOSAL MUST BE IN ACCORDANCE WITH STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE, 48 CFR 262

14. TRANSPORT INFORMATION

Land Transport (DOT)
14.1 USDOT ID Number----------> UN2536
14.2 USDOT Shipping Name----------> Methyltetrahydrofuran
14.3 USDOT Hazard Classification-------> 3 (Flammable Liquid)
USDOT Label Codes----------> 3
14.4 USDOT Package Code----------> II
14.5 Marine Pollutant----------> No
14.6 Special precautions for user--------> No
Emergency Response Guide--------> 127

Sea Transport (IMDG)
14.1 ID Number----------> UN2536
14.2 Proper shipping name----------> METHYLTETRAHYDROFURAN (Tetrahydro-2-methylfuran)
14.3 Hazard Classification----------> 3 (Flammable Liquid)
Label Codes----------> 3
14.4 Package Code----------> II
14.5 Marine Pollutant----------> No
14.6 Special precautions for user----------> No

EMS-Number----------> F-E, S-D

Air Transport (IATA)
14.1 ID Number----------> UN2536
14.2 Proper shipping name----------> Methyltetrahydrofuran (Tetrahydro-2-methylfuran)
14.3 Hazard Classification----------> 3 (Flammable Liquid)
Label Codes----------> 3
14.4 Package Code----------> II
14.5 Environmental hazard----------> None
14.6 Special precautions for user----------> Yes

15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE:

SARA TITLE III (Superfund Amendment and Reauthorization Act)

SECTION 302 AND 304: Extremely Hazardous Substance List (40 CFR 355) - Not Listed
SECTION 313: Toxic Chemicals Listing (40 CFR 372.65) - Not Listed
SECTION 311/312: Hazard Categorization (40 CFR 370) – Fire Hazard

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)

SECTION 102(A) Hazardous Substances (40 CFR 302.4) - Not Listed
Reportable Quantity - None
SECTION 101(14) Reportable Quantity: None

Massachusetts Right to Know Components
Tetrahydro-2-methylfuran CAS-No.96-47-9
2, 6-di-tert-Butyl-p-cresol CAS-No.128-37-0

Pennsylvania Right to Know Components
Tetrahydro-2-methylfuran CAS-No.96-47-9
2, 6-di-tert-Butyl-p-cresol CAS-No.128-37-0

New Jersey Right to Know Components
Tetrahydro-2-methylfuran CAS-No.96-47-9
2, 6-di-tert-Butyl-p-cresol CAS-No.128-37-0

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

TSCA (Toxic Substance Control Act)
Tetrahydro-2-methylfuran CAS-No.96-47-9 is listed on the TSCA Inventory.

International Inventories:

Country or Region	Inventory Name	On inventory yes/no
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemicals Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Japan	Industrial Safety & Health Law Inventory (ISHL)	Yes
Korea	Existing Chemicals List (ECL)	Yes
Mexico	National Inventory of Chemical Substances (INSQ)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Switzerland	Inventory of Notified New Substances (CHINV)	Yes
Taiwan	National Existing Chemical Inventory (NECI)	Yes
United States & Puerto Rico	Toxic Substances Control Act Inventory	Yes

15.2 CHEMICAL SAFETY ASSESSMENT: A chemical safety assessment has been carried out for this substance.

16. OTHER INFORMATION:

HMIS (Hazardous Materials Identification System)
Hazard Rating:
4-Extreme
3-High
2-Moderate
1-Slight
0-Insignificant

NFPA RATINGS (SCALE 0-4): Health=2 Fire=3 Reactivity=1
HMIS RATINGS (SCALE 0-4) Health=2 Fire=3 Reactivity=1 PPE=H

Hazard statement(s) from Section 2 and 3:
H225 Highly flammable liquid and vapor.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.

Date of preparation--------> October 15, 2009
Revision Number----------> 1.6
Revision Content----------> Corrected UN Number Section 14
Revision Date----------> January 6, 2023
Prepared by----------> T.G. Fenstermaker Jr.

Acronyms:

ACGIH	-	American Conference of Governmental Industrial Hygenists
AIHA	-	American Industrial Hygiene Association
ANSI	-	American Nation Standards Institute
API	-	American Petroleum Institute
CERCLA	-	Comprehensive Emergency Response, Compensation, and Liability Act
DOT	-	U.S. Department of Transportation
EPA	-	U.S. Environmental Protection Agency
HMIS	-	Hazardous Materials Information System
IARC	-	International Agency For Research On Cancer
MSHA	-	Mine Safety and Health Administration
NFPA	-	National Fire Protection Association
NIOSH	-	National Institute of Occupational Safety and Health
NOIC	-	Notice of Intended Change (Proposed change to ACGIH TLV)
NTP	-	National Toxicology Program
OPA	-	Oil Pollution Act of 1990
OSHA	-	U.S. Occupational Safety & Health Administration
PEL	-	Permissible Exposure Limit (OSHA)
RCRA	-	Resource Conservation and Recovery Act
REL	-	Recommended Exposure Limit (NIOSH)
SARA	-	Superfund Amendments and Reauthorization Act of 1986 Title III
SCBA	-	Self-Contained Breathing Apparatus
STEL	-	Short-Term Exposure Limit (generally 15 minutes)
TLV	-	Threshold Limit Value
TSCA	-	Toxic Substances Control Act
TWA	-	Time Weighted Average (8hr.)
WHMIS	-	Canadian Workplace Hazardous Materials Information System