

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form	: Substance
Trade name	: 2-Methyltetrahydrofuran
IUPAC name	: Tetrahydro-2-methylfuran
EC-No.	: 202-507-4
CAS-No.	: 96-47-9
REACH registration No.	: 01-2119968920-28
Type of product	: Commercial product is usually stabilized
Formula	: C ₅ H ₁₀ O
Synonyms	: 2-methyloxolane / furan, tetrahydro-2-methyl- / MTHF / tetrahydro-2-methylfuran / tetrahydromethylfuran(=2-methyltetrahydrofuran) / tetrahydrosilvan / tetrahydrosylvan
Product group	: Trade product
BIG No	: 11354

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

1.2.1. Relevant identified uses

Industrial/Professional use spec	: Industrial For professional use only
Use of the substance/mixture	: Solvent Chemical intermediate

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Monument Chemical B.V.
Ketenislaan 3
BE B-9130 Kallo
Belgium
T +32 3 570 28 11
sds@monumentchemical.com, www.monumentchemical.com

1.4. Emergency telephone number

Emergency number : BIG 24h/24h: +32 14 58 45 45

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 2	H225
Acute toxicity (oral), Category 4	H302
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 1	H318
Full text of H- and EUH-statements: see section 16	

Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. Harmful if swallowed. Causes skin irritation. Causes serious eye damage.

2-Methyltetrahydrofuran

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS05

GHS07

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H225 - Highly flammable liquid and vapour.

H302 - Harmful if swallowed.

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P233 - Keep container tightly closed.

P240 - Ground and bond container and receiving equipment.

P241 - Use explosion-proof electrical/ventilating/lighting equipment.

P264 - Wash hands, forearms and face thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P301+P312 - IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.

P302+P352 - IF ON SKIN: Wash with plenty of water.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water or shower.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTER or doctor.

P321 - Specific treatment (see supplemental first aid instruction on this label).

P330 - Rinse mouth.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P370+P378 - In case of fire: Use alcohol resistant foam, Water spray, dry extinguishing powder, carbon dioxide (CO₂) to extinguish.

P403+P235 - Store in a well-ventilated place. Keep cool.

P501 - 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

Other hazards which do not result in classification : May form explosive peroxides.

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-Methyltetrahydrofuran	CAS-No.: 96-47-9 EC-No.: 202-507-4 REACH-no: 01-2119968920-28	≥ 99	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318

Full text of H- and EUH-statements: see section 16

3.2. Mixtures

Not applicable

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SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.
First-aid measures after inhalation	: Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.
First-aid measures after skin contact	: Rinse with water. Soap may be used. Do not apply (chemical) neutralizing agents without medical advice. Take victim to a doctor if irritation persists.
First-aid measures after eye contact	: Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply (chemical) neutralizing agents without medical advice.
First-aid measures after ingestion	: Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Call Poison Information Centre (www.big.be/antigif.html). Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital.

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

Symptoms/effects after inhalation	: EXPOSURE TO HIGH CONCENTRATIONS: Nausea. Headache. Dizziness. Narcosis.
Symptoms/effects after skin contact	: Slight irritation.
Symptoms/effects after eye contact	: Slight irritation.
Symptoms/effects after ingestion	: Risk of aspiration pneumonia.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Quick-acting ABC powder extinguisher. Quick-acting BC powder extinguisher. Quick-acting class B foam extinguisher. Quick-acting CO2 extinguisher. Class B foam (alcohol-resistant). Water spray if puddle cannot expand.
Unsuitable extinguishing media	: Water (quick-acting extinguisher, reel); risk of puddle expansion. Water; risk of puddle expansion.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: DIRECT FIRE HAZARD: Highly flammable liquid and vapour. Gas/vapour flammable with air within explosion limits. INDIRECT FIRE HAZARD: May be ignited by sparks. Gas/vapour spreads at floor level: ignition hazard. Reactions involving a fire hazard: see "Reactivity Hazard".
Explosion hazard	: DIRECT EXPLOSION HAZARD: Gas/vapour explosive with air within explosion limits. INDIRECT EXPLOSION HAZARD: May be ignited by sparks. Reactions with explosion hazards: see "Reactivity Hazard".
Hazardous decomposition products in case of fire	: Upon combustion: CO and CO2 are formed.

5.3. Advice for firefighters

Firefighting instructions	: Cool tanks/drums with water spray/remove them into safety. Do not move the load if exposed to heat. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.
Protection during firefighting	: Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

6.1.1. For non-emergency personnel

Protective equipment : Gloves (EN 374). Protective clothing (EN 14605 or EN 13034). Large spills/in enclosed spaces: self-contained breathing apparatus (EN 136 + EN 137).

Emergency procedures : Keep upwind. Mark the danger area. Consider evacuation. Seal off low-lying areas. Close doors and windows of adjacent premises. Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment. Keep containers closed. Wash contaminated clothes.

6.1.2. For emergency responders

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

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain released product, collect/pump into suitable containers. Plug the leak, cut off the supply. Dam up the liquid spill. Try to reduce evaporation. Measure the concentration of the explosive gas-air mixture. Dilute/disperse combustible gas/vapour with water curtain. Provide equipment/receptacles with earthing. Do not use compressed air for pumping over spills.

Methods for cleaning up : Damaged/cooled tanks must be emptied. Do not use compressed air for pumping over spills. Take up liquid spill into a non combustible material e.g.: dry sand/earth/vermiculite or powdered limestone. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Take collected spill to manufacturer/competent authority. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection. For further information refer to section 13.

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 : Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Measure the concentration in the air regularly. Work under local exhaust/ventilation. Comply with the legal requirements. Clean contaminated clothing. Handle and open the container with care. Cool before opening. Handle uncleaned empty containers as full ones. Thoroughly clean/dry the installation before use. Do not use compressed air for pumping over. Keep container tightly closed. Before use: check for peroxides and eliminate them.

Hygiene measures : Observe normal hygiene standards.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment.

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Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : Heat sources, Ignition sources, Incompatible materials. Keep in fireproof place. Keep container tightly closed. Store in a well-ventilated place. Keep cool.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight. Heat sources.
Heat and ignition sources	: KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.
Information on mixed storage	: KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) acids. (strong) bases.
Storage area	: Store in a cool area. Store in a dark area. Ventilation at floor level. Provide for a tub to collect spills. Provide the tank with earthing. May be stored under nitrogen. Meet the legal requirements.
Special rules on packaging	: SPECIAL REQUIREMENTS: closing. clean. opaque. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

Germany

Storage class (LGK, TRGS 510)

Joint storage table

: LGK 3 - Flammable liquids

LGK 1	LGK 2A	LGK 2B	LGK 3	LGK 4.1A
LGK 4.1B	LGK 4.2	LGK 4.3	LGK 5.1A	LGK 5.1B
LGK 5.1C	LGK 5.2	LGK 6.1A	LGK 6.1B	LGK 6.1C
LGK 6.1D	LGK 6.2	LGK 7	LGK 8A	LGK 8B
LGK 10	LGK 11	LGK 12	LGK 13	LGK 10-13

Joint storage not permitted for

: LGK 1, LGK 2A, LGK 4.1A, LGK 4.1B, LGK 4.2, LGK 4.3, LGK 5.1A, LGK 5.1C, LGK 5.2, LGK 6.1B, LGK 6.2, LGK 7

Joint storage with restrictions permitted for

: LGK 5.1B, LGK 6.1D, LGK 11, LGK 10-13

Joint storage permitted for

: LGK 2B, LGK 3, LGK 6.1A, LGK 6.1C, LGK 8A, LGK 8B, LGK 10, LGK 12, LGK 13

Switzerland

Storage class (LK)

: LK 3 - Flammable liquids

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

2-Methyltetrahydrofuran (96-47-9)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	3.26 mg/kg bw/day
Acute - systemic effects, inhalation	200.196 mg/m ³
Long-term - systemic effects, dermal	0.13 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.46 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, oral	1.25 mg/kg bw/day
Long-term - systemic effects, oral	1.25 mg/kg bw/day

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2-Methyltetrahydrofuran (96-47-9)	
PNEC (Water)	
PNEC aqua (freshwater)	2.08 mg/l
PNEC aqua (marine water)	0.208 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	16 mg/kg dwt
PNEC sediment (marine water)	1.6 mg/kg dwt
PNEC (Soil)	
PNEC soil	1.9 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	6 kg/kg food
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Protective goggles (EN 166)

8.2.2.2. Skin protection

Skin and body protection:

Protective clothing (EN 14605 or EN 13034)

Hand protection:

Gloves

Other skin protection

Materials for protective clothing:

Good resistance: Butyl rubber. Viton. Poor resistance: Natural rubber

8.2.2.3. Respiratory protection

Respiratory protection:

Full face mask with filter type A. High vapour/gas concentration: self-contained breathing apparatus (EN 136 + EN 137)

8.2.2.4. Thermal hazards

No additional information available

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8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Appearance	: Clear, colorless liquid.
Molecular mass	: 86.14 g/mol
Odour	: Ether-like odour.
Odour threshold	: Not available
Melting point	: -136 °C
Freezing point	: Not available
Boiling point	: 78 °C Atm. press.: 1013 hPa
Flammability	: Highly flammable liquid and vapour.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: -10 °C Atm. press.: 101,3 kPa Remarks on result: 'other:'
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: 4.706 mm ² /s
Viscosity, dynamic	: 4 mPa·s (25 °C)
Solubility	: Soluble in water. Soluble in ethanol. Soluble in ether. Soluble in acetone. Soluble in chloroform. Water: 15 g/100ml
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 13.5 kPa at 20°C (68°F)
Vapour pressure at 50°C	: 345 hPa
Density	: 850 kg/m ³
Relative density	: 0.85 at 20°C (68°F)
Relative vapour density at 20°C	: 3
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Explosion limits : 1.5 – 8.9 vol %

9.2.2. Other safety characteristics

VOC content : 100 %
Other properties : Gas/vapour heavier than air at 20°C, Volatile, Neutral reaction

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts violently with (strong) oxidizers: (increased) risk of fire. Reacts violently with (some) acids/bases. Unstabilised product: reacts on exposure to air and on exposure to light: peroxidation resulting in increased fire or explosion risk.

10.2. Chemical stability

Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

Not established.

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10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

2-Methyltetrahydrofuran (96-47-9)

LD50 oral rat	300 – 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	4500 mg/kg (Rabbit, Dermal)
LC50 Inhalation - Rat	21.5 mg/l (4 h, Rat, Inhalation)
LC50 Inhalation - Rat [ppm]	6000 ppm (4 h, Rat, Inhalation)

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye damage.
Respiratory or skin sensitisation : Not classified
Additional information : Based on available data, the classification criteria are not met
Germ cell mutagenicity : Not classified
Additional information : Based on available data, the classification criteria are not met
Carcinogenicity : Not classified
Additional information : Based on available data, the classification criteria are not met
Reproductive toxicity : Not classified
Additional information : Based on available data, the classification criteria are not met
STOT-single exposure : Not classified
Additional information : Based on available data, the classification criteria are not met
STOT-repeated exposure : Not classified
Additional information : Based on available data, the classification criteria are not met

2-Methyltetrahydrofuran (96-47-9)

NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, vapour, 90 days)	> 9.96 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)

Aspiration hazard : Not classified
Additional information : Based on available data, the classification criteria are not met

2-Methyltetrahydrofuran (96-47-9)

Viscosity, kinematic	4.706 mm ² /s
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11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

2-Methyltetrahydrofuran

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11.2.2. Other information

Potential adverse human health effects and symptoms : Narcotic in high concentrations, Non-toxic if swallowed (LD50 oral, rat > 5000 mg/kg), Practically non-toxic in contact with skin (LD50 skin > 2000 mg/kg)

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.

Ecology - air : None of the known components is included in the list of substances which may contribute to the greenhouse effect (IPCC). None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).

Ecology - water : No data available on ecotoxicity.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

2-Methyltetrahydrofuran (96-47-9)	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	> 139 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 104 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
LOEC (chronic)	> 120 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	≥ 120 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

2-Methyltetrahydrofuran (96-47-9)	
Persistence and degradability	Biodegradability in water: no data available.

12.3. Bioaccumulative potential

2-Methyltetrahydrofuran (96-47-9)	
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Additional information : Avoid release to the environment.

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Incinerate under surveillance with energy recovery.
Additional information	: Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.
Ecological information	: Avoid release to the environment.
European List of Waste (LoW, EC 2000/532)	: 15 01 10* - packaging containing residues of or contaminated by dangerous substances 16 03 05* - organic wastes containing dangerous substances
HP Code	: HP3 - "Flammable:" – flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C; – flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air; – flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction; – flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa; – water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities; – other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste. HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure. HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

UN-No. (ADR)	: UN 2536
UN-No. (IMDG)	: UN 2536
UN-No. (IATA)	: UN 2536
UN-No. (ADN)	: UN 2536
UN-No. (RID)	: UN 2536

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: methyltetrahydrofuran
Proper Shipping Name (IMDG)	: methyltetrahydrofuran
Proper Shipping Name (IATA)	: methyltetrahydrofuran
Proper Shipping Name (ADN)	: methyltetrahydrofuran
Proper Shipping Name (RID)	: methyltetrahydrofuran
Transport document description (IMDG)	: UN 2536 methyltetrahydrofuran, 3, II
Transport document description (IATA)	: UN 2536 methyltetrahydrofuran, 3, II
Transport document description (ADN)	: UN 2536 methyltetrahydrofuran, 3, II
Transport document description (RID)	: UN 2536 methyltetrahydrofuran, 3, II

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	: 3
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Danger labels (ADR) : 3
:



IMDG

Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3
:



IATA

Transport hazard class(es) (IATA) : 3
Danger labels (IATA) : 3
:



ADN

Transport hazard class(es) (ADN) : 3
Danger labels (ADN) : 3
:



RID

Transport hazard class(es) (RID) : 3
Danger labels (RID) : 3
:



14.4. Packing group

Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Transport regulations (ADR) : Subject to the provisions
Classification code (ADR) : F1
Hazard identification number (Kemler No.) : 33

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Orange plates

:



Tunnel restriction code (ADR)

: D/E

EAC code

: •2YE

Transport by sea

Transport regulations (IMDG)

: Subject to the provisions

EmS-No. (Fire)

: F-E

EmS-No. (Spillage)

: S-D

Air transport

Transport regulations (IATA)

: Subject to the provisions

Inland waterway transport

Classification code (ADN)

: F1

Rail transport

Transport regulations (RID)

: Subject to the provisions

Classification code (RID)

: F1

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Council Regulation (EC) for the control of dual-use items

Not listed on the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

VOC Directive (2004/42)

VOC content : 100 %

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

2-Methyltetrahydrofuran

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according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

15.1.2. National regulations

Germany

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV; ID No. 7543).
Hazardous Incident Ordinance (12. BImSchV) : Is not subject to the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

ABM category : B(4) - low hazard for aquatic organisms
SZW-lijst van kankerverwekkende stoffen : The substance is not listed
SZW-lijst van mutagene stoffen : The substance is not listed
SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : The substance is not listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed
Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

A chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit

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Abbreviations and acronyms:

PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
Skin Irrit. 2	Skin corrosion/irritation, Category 2

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

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