MTBE HP

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 1/12/2026 Revision date: 11/16/2022 Supersedes version of: 11/16/2022 Version: 2.0

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

1.1. Product identifier

Product form	:	Substance
Trade name	:	MTBE HP
Chemical name	:	methyl tert-butyl ether
IUPAC name	:	tert-butyl methyl ether
EC Index-No.	:	603-181-00-X
EC-No.	:	216-653-1
CAS-No.	:	1634-04-4
REACH registration No.	:	01-2119452786-27
Product code	:	ED09910010
Type of product	:	Pure substance
Formula	:	C5H12O
Synonyms	:	2-methoxy-2-methylpropane / BPLA-F MTBE / ether, tert-butyl methyl / methyl t-butyl ether / methyl tert-butyl ether / methyl-tert-butyl ether / methyl-tertiary-butyl ether / MTB / MTBE / propane, 2-methoxy-2-methyl- / t-butyl methyl ether / tert-butyl methyl ether / tertiary-butylmethyl ether
Product group	:	Trade product
BIG No	:	11340

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

Relevant identified uses

Industrial/Professional use spec	:	Industrial For professional use only
Use of the substance/mixture	:	Solvent Fuel: additive

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
Skin corrosion/irritation, Category 2	H315

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

Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. Causes skin irritation.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS02 GHS07

Signal word (CLP) : Danger

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.
H315 - Causes skin irritation.

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, lighting, ventilating equipment.
P264 - Wash hands thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
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 .
P321 - Specific treatment (see information on this label).
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, carbon dioxide (CO2), dry extinguishing powder, Water spray 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

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

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]
methyl tert-butyl ether	CAS-No.: 1634-04-4 EC-No.: 216-653-1 EC Index-No.: 603-181-00-X REACH-no: 01-2119452786-27	≥ 99.9	Flam. Liq. 2, H225 Skin Irrit. 2, H315

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the SDS where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. Wash with plenty of water/…. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label). If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. Rinse eyes with water as a precaution.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation : EXPOSURE TO HIGH CONCENTRATIONS: Coughing. Respiratory difficulties. Central nervous system depression. Headache. Nausea. Vomiting. Dizziness. Coordination disorders. Feeling of weakness. Disturbances of consciousness.

Symptoms/effects after skin contact : Causes skin irritation. Irritation.

Symptoms/effects after eye contact : Redness of the eye tissue. EXPOSURE TO HIGH CONCENTRATIONS: Lacrimation.

Symptoms/effects after ingestion : Risk of aspiration pneumonia. AFTER INGESTION OF HIGH QUANTITIES: Central nervous system depression. Symptoms similar to those listed under inhalation.

Chronic symptoms : Red skin. Dry skin. Itching.

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 : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.

Explosion hazard : May form flammable/explosive vapour-air mixture.

Hazardous decomposition products in case of fire : Upon combustion: CO and CO2 are formed.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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.

For non-emergency personnel

Protective equipment	:	Gloves (EN 374). Protective goggles (EN 166). Head/neck protection. Protective clothing (EN 14605 or EN 13034). Large spills/in enclosed spaces: gas-tight suit (EN 943). Large spills/in enclosed spaces: self-contained breathing apparatus (EN 136 + EN 137).
Emergency procedures	:	Ventilate spillage area. Evacuate unnecessary personnel. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes.

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	:	Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Notify authorities if product enters sewers or public waters.
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	:	Ensure good ventilation of the work station. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No open flames. No smoking. Use only non-sparking tools. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes.
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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.
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: combustible materials. oxidizing agents. (strong) acids. (strong) bases. halogens. peroxides.

Storage area	:	Meet the legal requirements. Store at ambient temperature. Keep out of direct sunlight. Store in a dark area. Keep container in a well-ventilated place. Fireproof storeroom. Store only in a limited quantity. Provide for a tub to collect spills. Provide the tank with earthing. May be stored under nitrogen.
Special rules on packaging	:	SPECIAL REQUIREMENTS: closing. opaque. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
Packaging materials	:	SUITABLE MATERIAL: steel. stainless steel. carbon steel. copper. bronze. polyethylene. polypropylene. aluminium. glass.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

methyl tert-butyl ether (1634-04-4)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	183.5 mg/m³
	50 ppm
IOEL STEL	367 mg/m³
	100 ppm
Belgium - Occupational Exposure Limits	
OEL TWA	146 mg/m³
	40 ppm
OEL STEL	367 mg/m³
	100 ppm
France - Occupational Exposure Limits	
VLEP 8h (OEL TWA)	183.5 mg/m³
	50 ppm
VLEP CT (OEL STEL)	367 mg/m³
	100 ppm
Germany - Occupational Exposure Limits (TRGS 900)	
Local name	(tert-Butyl)methylether
AGW (OEL TWA)	180 mg/m³
	50 ppm
Peak exposure limitation factor	1,5(I)
Remark	DFG,EU,Y
Regulatory reference	TRGS900
Italy - Occupational Exposure Limits	
Local name	Ossido di terz-butile e metile
OEL TWA	183.5 mg/m³
	50 ppm
OEL STEL	357 mg/m³

methyl tert-butyl ether (1634-04-4)	
	100 ppm
Regulatory reference	Allegato XXXVIII del D.Lgs. 9 aprile 2008, n. 81 e s.m.i. (D.Lgs. 4 settembre 2024, n. 135)
Netherlands - Occupational Exposure Limits	
Local name	tert-Butylmethylether
TGG-8u (OEL TWA)	180 mg/m³
	49 ppm
TGG-15min (OEL STEL)	360 mg/m³
	98 ppm
Regulatory reference	Arbeidsomstandighedenregeling 2024
Spain - Occupational Exposure Limits	
Local name	Metil terc-butiléter (Éter metil-terc-butílico)
VLA-ED (OEL TWA)	183.5 mg/m³
	50 ppm
VLA-EC (OEL STEL)	367 mg/m³
	100 ppm
Remark	VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo. Todos estos agentes químicos figuran al menos en una de las directivas de valores límite indicativos publicadas hasta ahora (ver Anexo C. Bibliografía). Los estados miembros disponen de un tiempo fijado en dichas directivas para su transposición a los valores límites de cada país miembro. Una vez adoptados, estos valores tienen la misma validez que el resto de los valores adoptados por el país).
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2025. INSHT
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	183.5 mg/m³
	50 ppm
WEL STEL (OEL STEL)	367 mg/m³
	100 ppm
USA - ACGIH® - Threshold Limit Values	
Local name	Methyl tert-butyl ether
ACGIH® TLV® TWA	180 mg/m³
	50 ppm
Remark (ACGIH®)	TLV® Basis: URT irr; kidney dam. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2025

DNEL and PNEC

methyl tert-butyl ether (1634-04-4)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	357 mg/m³
Long-term - systemic effects, dermal	5100 mg/kg bw/day
Long-term - systemic effects, inhalation	178.5 mg/m³

methyl tert-butyl ether (1634-04-4)	
DNEL/DMEL (General population)	
Acute - local effects, inhalation	214 mg/m³
Long-term - systemic effects,oral	7.1 mg/kg bw/day
Long-term - systemic effects, inhalation	53.6 mg/m³
Long-term - systemic effects, dermal	3570 mg/kg bw/day
PNEC (Water)	
PNEC aqua (freshwater)	5.1 mg/l
PNEC aqua (marine water)	0.26 mg/l
PNEC aqua (intermittent, freshwater)	47.2 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	23 mg/kg dwt
PNEC sediment (marine water)	1.17 mg/kg dwt
PNEC (Soil)	
PNEC soil	1.56 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	71 mg/l

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:
Avoid all unnecessary exposure.
Personal protective equipment symbol(s):

Eye and face protection

Eye protection:
Chemical goggles or safety glasses. Safety glasses

Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Wear protective gloves.

Other skin protection
Materials for protective clothing:
Excellent resistance: Polyethylene/ethylenevinylalcohol. Good resistance: Nitrile rubber. Polyvinylalcohol (PVA). neoprene (chloroprene rubber). Poor resistance: Natural rubber. Butyl rubber

Respiratory protection

Respiratory protection:
Wear appropriate mask

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	:	Liquid.
Molecular mass	:	88.15 g/mol
Odour	:	Camphor odour. Ether-like odour. Peppermint odour.
Odour threshold	:	Not available
Melting point	:	-109 °C (1013 hPa)
Freezing point	:	Not available
Boiling point	:	55 °C (1013 hPa)
Flammability	:	Highly flammable liquid and vapour.
Explosive properties	:	Not classified.
Oxidising properties	:	Not classified.
Lower explosion limit	:	1.6 vol %
Upper explosion limit	:	8.5 vol %
Flash point	:	-28 °C (Closed cup, 1013 hPa)
Auto-ignition temperature	:	Not available
Decomposition temperature	:	No data available in the literature
pH	:	7 (4.1 %, 20 °C)
Viscosity, kinematic	:	0.464 mm²/s (20 °C, OECD 114: Viscosity of Liquids)
Viscosity, dynamic	:	0.34 mPa·s (20 °C)
Solubility	:	Moderately soluble in water. Substance floats in water. Soluble in ethanol. Soluble in ether. Soluble in gasoline. Water: 4.2 g/100ml (20 °C, Equivalent or similar to OECD 105)
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Partition coefficient n-octanol/water (Log Pow)	:	1.06 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20 °C)
Vapour pressure	:	33000 Pa Temp.: 25 °C
Vapour pressure at 50°C	:	850 hPa
Critical pressure	:	34300 hPa
Saturation concentration	:	1165 g/m³
Density	:	740 kg/m³ (20 °C)
Relative density	:	0.74 (20 °C)
Relative vapour density at 20°C	:	3.2 (20 °C)
Relative density of saturated gas/air mixture	:	1.5
Particle characteristics	:	Not applicable

9.2. Other information

Information with regard to physical hazard classes

Explosion limits	:	1.6 – 8.5 vol % 60 – 310 g/m³
Critical temperature	:	224 °C

Other safety characteristics

Relative evaporation rate (butylacetate=1)	:	8.5
Relative evaporation rate (ether=1)	:	1.6
Specific conductivity	:	< 100 pS/m
VOC content	:	100 %
Surface tension	:	19.3 mN/m (25 °C, 100 %, EU Method A.5: Surface tension)
Other properties	:	Gas/vapour heavier than air at 20°C,Clear,Highly volatile,Neutral reaction,May generate electrostatic charges

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts violently with (strong) oxidizers: (increased) risk of fire/explosion. Reacts violently with (some) acids. Prolonged storage: may form peroxides. This reaction is accelerated on exposure to light.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Not established.

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) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

methyl tert-butyl ether (1634-04-4)	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	85 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))

Skin corrosion/irritation : Causes skin irritation.
pH: 7 (4.1 %, 20 °C)
Serious eye damage/irritation : Not classified
pH: 7 (4.1 %, 20 °C)
Additional information : Based on available data, the classification criteria are not met
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
Aspiration hazard : Not classified
Additional information : Based on available data, the classification criteria are not met

methyl tert-butyl ether (1634-04-4)	
Viscosity, kinematic	0.464 mm²/s (20 °C, OECD 114: Viscosity of Liquids)

11.2. Information on other hazards

Other information

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met

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 : Not included in the list of substances which may contribute to the greenhouse effect (IPCC). Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573). Not classified as dangerous for the ozone layer (Regulation (EC) No 2024/590).

Ecology - water : Slightly harmful to crustacea (Daphnia). Slightly harmful to fishes. Groundwater pollutant. Slightly harmful to algae. Slightly harmful to bacteria.

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

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

methyl tert-butyl ether (1634-04-4)	
LC50 - Fish [1]	672 mg/l (US EPA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	472 mg/l (US EPA, 48 h, Daphnia magna, Flow-through system, Fresh water, Experimental value, Locomotor effect)

12.2. Persistence and degradability

methyl tert-butyl ether (1634-04-4)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

methyl tert-butyl ether (1634-04-4)	
BCF - Fish [1]	1.5 (28 day(s), Cyprinus carpio, Flow-through system, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	1.06 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500). Not established.

12.4. Mobility in soil

methyl tert-butyl ether (1634-04-4)	
Surface tension	19.3 mN/m (25 °C, 100 %, EU Method A.5: Surface tension)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.96 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.

12.5. Results of PBT and vPvB assessment

methyl tert-butyl ether (1634-04-4)	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	
Results of PBT assessment	The product does not meet the PBT and vPvB classification criteria

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

methyl tert-butyl ether (1634-04-4)	
Other information	Avoid release to the environment.

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 : Dispose in a safe manner in accordance with local/national regulations. 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. Flammable vapours may accumulate in the container.

Ecological waste 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

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.
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

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (ADR) : methyl tert-butyl ether

Proper Shipping Name (IMDG) : Methyl-tert-butylether

Proper Shipping Name (IATA) : Methyl-tert-butylether

Proper Shipping Name (ADN) : METHYL TERT-BUTYL ETHER

Proper Shipping Name (RID) : Methyl-tert-butylether

Transport document description (ADR) (ADR) : UN 2398 methyl tert-butyl ether, 3, II, (D/E)

Transport document description (IMDG) : UN 2398 Methyl-tert-butylether, 3, II
Transport document description (IATA) : UN 2398 Methyl-tert-butylether, 3, II
Transport document description (ADN) : UN 2398 METHYL TERT-BUTYL ETHER, 3, II
Transport document description (RID) : UN 2398 Methyl-tert-butylether, 3, II

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3
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

EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-D
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
Limited quantities (ADR) : 1l
Hazard identification number (Kemler No.) : 33
Orange plates :

Tunnel restriction code (ADR) : D/E
EAC code : •3YE

Transport by sea

Transport regulations (IMDG) : Subject to the provisions

Air transport

Transport regulations (IATA) : Subject to the provisions
PCA limited quantity max net quantity (IATA) : 1L
CAO max net quantity (IATA) : 60L

Inland waterway transport

Classification code (ADN) : F1
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E2
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EX, A
Ventilation (ADN) : VE01
Number of blue cones/lights (ADN) : 1

Rail transport

Transport regulations (RID) : Subject to the provisions
Classification code (RID) : F1
Limited quantities (RID) : 1L

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

EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)

Reference code	Applicable on	Entry title or description
3(a)	MTBE HP	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F
3(b)	MTBE HP	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

EU restriction list (REACH Annex XVII)		
Reference code	**Applicable on**	**Entry title or description**
40.	MTBE HP	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.

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 (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

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

Not listed on the COUNCIL REGULATION (EC) of dual-use items.

VOC Directive (2004/42)

VOC content : 100 %

Explosives Precursors Regulation (EU 2019/1148)

Not listed on the Explosives Precursors list (EU)

Drug Precursors Regulation (EC 273/2004)

Not listed on the Drug Precursors list (EU)

National regulations

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Subject to reporting requirements of United States SARA Section 313

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

Finland

France

Occupational diseases	
Code	Description
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide

Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 1200).
VOC content : 100 %
Technical Instructions on Air Quality Control (TA Luft) : 5.2.5 Organic Substances.

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

Poland

Polish National Regulations : Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended; consolidated text J. o L. 2019, item 1225).
Act of 14 December 2012 on waste (J. o L. 2013, item 322 as amended; consolidated text J. o L. 2020, item 797).
The announcement of Marshal of the Sejm of the Republic of Poland dated 19 October 2016 concerning the consolidated text announcement of the decree on the management of packaging and packaging waste (J. o L. 2016, item 1863 as amended).
Decree of the Minister of Environment of 14 December 2014 on the catalogue of waste (J. o L. 2014, item 1923).
Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item 1367 as amended; consolidated text J. o L. 2020, item 154).
Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the highest permissible concentration and intensity of noxious agents for health at work environment (J. o L. item 1286 as amended).
The announcement of Minister of Health dated 9 September 2016 concerning the consolidated text announcement of the decree of the Minister of Health of 30 December 2004 on health and safety at work related to exposure to chemical agents at work (J. o L. of 16 September 2016, item 1488)
Regulation of the Minister of Health of 2 February 2011 on tests and measurements of the noxious agents for health at work environment (J. o L. No. 33, item 166 as amended).
Regulation of the Minister of Environment of 9 December 2003 on particularly hazardous substances to the environment (J. o L. No. 217, item 2141).
ADR Agreement: Government Statement of 13 March 2023 on the entry into force of amendments to Annexes A and B to the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (J. o. L. 2023, item 891)
Regulation of the Minister of Health of 25 August 2015 on the method of marking places, pipelines, and containers and tanks used for storing or containing hazardous substances or hazardous mixtures (J.o.L. 2015, item 1368 as amended)

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

Abbreviations and acronyms:	
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
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 Abstracts Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

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:	
Flam. Liq. 2	Flammable liquids, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

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