

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product form	: Substance
Trade name	: MTBE
Chemical name	: tert-butyl methyl ether / MTBE / 2-methoxy-2-methylpropane
CAS No	: 1634-04-4
EC No	: 216-653-1
Index no	: 603-181-00-X
REACH No	: 01-2119452786-27-0032
Formula	: C ₅ H ₁₂ O
Synonyms	: BPLA-F MTBE / ether, tert-butyl methyl / high purity-methyl tertiary butyl ether / methyl t-butyl ether / Methyl tert-butyl ether / methyl-1,1-dimethylethyl ether / methyl-tertiary-butyl ether / MTB / propane, 2-methoxy-2-methyl- / t-butyl methyl ether / tert-butyl methyl ether / tertiary- butylmethyl ether
Product group	: Trade product

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Main use category	: Industrial / Professional use
Use of the substance	: Solvent / Fuel: additive

1.2.2. Uses advised against

See Section 15.1, REACH Annex XVII - Restriction

1.3. Details of the supplier of the safety data sheet**1.3.1. Manufacturer/Supplier**

HIP-Petrohemija d.o.o. Pancevo
Spoljnostarcevacka 82
26000 Pancevo
Republic of Serbia
www.hip-petrohemija.com

Tel: + 381 (0) 13 307 000
Fax: + 381 (0) 13 310 207
E-mail (person responsible for the SDS):
ivana.kosovic@hip-petrohemija.rs

Synthetic rubber Plant
23208 Elemir
Republic of Serbia
fsk@hip-petrohemija.rs

Tel: + 381 (0) 23 758 600

1.4. Emergency telephone number

Poisoning Control Centre	: + 381 (0) 11 266 11 22 (00-24h) + 381 (0) 11 266 27 55 (00-24h) + 381 (0) 11 360 84 40 (00-24h)
HIP-Petrohemija (available during office hours: Monday to Friday)	: + 381 (0) 13 30 77 77 (08-16h)
European Emergency telephone number	: See Section 16 for the Poison centres in the EEA

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008 [CLP]**

Physical hazard:	Flam. Liq. 2	H225
Health hazard:	Skin Irrit. 2	H315

Note: Full text of hazard classes and H-statements: see section 16

2.2. Label elements**Labelling according to Regulation (EC) No 1272/2008 [CLP]**

Hazard pictograms:



Signal word:

DANGER

Hazard statements:

H225 – Highly flammable liquid and vapour.
 H315 – Causes skin irritation.

Precautionary statements:

- **Prevention:**
 - P210 – Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 - P280 – Wear eye protection, protective clothing, protective gloves.
- **Response:**
 - 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/shower.
 - 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.
- **Storage:**
 - P403 + P235 – Store in a well-ventilated place. Keep cool.
- **Disposal:**
 - 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

Results of PBT and vPvB assessment : Under assessment as Persistent, Bioaccumulative and Toxic.
Endocrine disrupting properties : Under assessment as Endocrine Disrupting.

SECTION 3: Composition/information on ingredients

3.1. Substance

Substance name	Product identifier	% (m/m)	Classification according to Regulation (EC) No 1272/2008 [CLP]
tert-butyl methyl ether / MTBE / 2-methoxy-2-methylpropane	(CAS No) 1634-04-4 (EC No) 216-653-1 (Index No) 603-181-00-X (REACH No) 01-2119452786-27-0066	≥ 95,5	Flam. Liq. 2, H225 Skin Irrit. 2, H315

Note: Occupational exposure limits, are listed in Section 8. Full text of hazard classes and H-statements: see section 16

3.2. Mixture

Not applicable.

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. Never give alcohol to drink.

First-aid measures after inhalation

: Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

First-aid measures after skin contact

: Wash immediately with lots of water. Soap may be used. Do not apply (chemical)

First-aid measures after eye contact	neutralizing agents. Remove clothing before washing. Take victim to a doctor if irritation persists.
First-aid measures after ingestion	: Rinse immediately with plenty of water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.
Advice for a doctor	: Rinse mouth with water. Do not induce vomiting. Call Poison Information Centre. Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital. : Provide oxygen. Treat symptomatically.

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

Following inhalation	: EXPOSURE TO HIGH CONCENTRATIONS: Irritation of the respiratory tract. Irritation of the nasal mucous membranes. Coughing. Central nervous system depression. Headache. Nausea. Vomiting. Dizziness. Coordination disorders. Narcosis. Feeling of weakness. Disturbances of consciousness. Respiratory difficulties.
Following skin contact	: Tingling/irritation of the skin.
Following eye contact	: Slight irritation. Redness of the eye tissue. EXPOSURE TO HIGH CONCENTRATIONS: Lacrimation.
Following ingestion	: Risk of aspiration pneumonia. AFTER ABSORPTION OF HIGH QUANTITIES: Diarrhoea.
Chronic symptoms	: ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Red skin. Dry skin. Itching. Skin rash/inflammation.
Additional symptoms and effects	: See Section 11, Toxicological information.

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

Immediate medical attention	: In case of any unwanted reaction or inconvenience, call Poison Control Centre or a doctor and seek medical attention. See Subsection 1.4, Emergency telephone number.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: LARGE FIRE: AFFF foam. Polymer foam. Alcohol-resistant foam. BC powder. Carbon dioxide. MAJOR FIRE: Water spray.
Unsuitable extinguishing media	: DO NOT use direct water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: DIRECT FIRE HAZARD: Highly flammable. Gas/vapour flammable with air within explosion limits. INDIRECT FIRE HAZARD: May be ignited by sparks. Gas/vapour spreads at floor level: ignition hazard.
Explosion hazard	: DIRECT EXPLOSION HAZARD: Gas/vapour explosive with air within explosion limits. INDIRECT EXPLOSION HAZARD: Heat may cause pressure rise in tanks/drums: explosion risk. May be ignited by sparks.

5.3. Advice for firefighters

Firefighting instructions	: Cool tanks/drums with water spray/remove them into safety. Physical explosion risk: extinguish/cool from behind cover. Do not move the load if exposed to heat. After cooling: persistent risk of physical explosion.
Protection during firefighting	: Heat/fire exposure: compressed air/oxygen apparatus.
Special protective equipment for fire-fighters	: Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear. See Section 6, Accidental release measures.

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. Protective goggles. Head/neck protection. Protective clothing. Large spills/in enclosed spaces: compressed air apparatus.

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 personnel

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Land spillage : Prevent further leakage or spillage if safe to do so.

Spillages in water or at sea : Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

See Section 7, Handling and storage. See Subsection 8, Exposure controls and personal protection. See Section 13, Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

Hygiene measures : Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Safe storage : Take precautionary measures against static discharges. No smoking. Vapour space above stored liquid may be flammable/explosive unless blanketed with inert gas. Storage installations should be designed with adequate bunds so as to prevent ground and water pollution in case of leaks or spills.

Incompatibilities : Store in well-ventilated place away from direct sunlight, flames, ignition sources and other sources of heat.

7.3. Specific end use(s)

None.
See Subsection 7.1, Precautions for safe handling.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure limit values (Workplace Exposure Limits)

tert-butyl methyl ether, MTBE, 2-methoxy-2-methylpropane (1634-04-4)



EU	IOELV TWA (mg/m ³)	183.5 mg/m ³
EU	IOELV TWA (ppm)	50 ppm
EU	IOELV STEL (mg/m ³)	367 mg/m ³
EU	IOELV STEL (ppm)	100 ppm
Belgium	Limit value (mg/m ³)	146 mg/m ³
Belgium	Limit value (ppm)	40 ppm
Belgium	Short time value (mg/m ³)	367 mg/m ³
Belgium	Short time value (ppm)	100 ppm
France	VME (mg/m ³)	183.5 mg/m ³
France	VME (ppm)	50 ppm
France	VLE (mg/m ³)	367 mg/m ³
France	VLE (ppm)	100 ppm
Germany	TRGS 900 (mg/m ³)	180 mg/m ³
Germany	TRGS 900 (ppm)	50 ppm
Netherlands	Grenswaarde TGG 8H (mg/m ³)	180 mg/m ³
Netherlands	Grenswaarde TGG 8H (ppm)	49 ppm
Netherlands	Grenswaarde TGG 15MIN (mg/m ³)	360 mg/m ³
Netherlands	Grenswaarde TGG 15MIN (ppm)	98 ppm

**Directive 2009/161/EU*

8.1.2 Relevant DNELs/PNECs threshold levels

DNEL					
Used in	Chemical name CAS No	Exposure time	Efect	Route of exposure	Threshold level
Workers	tert-butyl methyl ether, MTBE, 2-methoxy-2- methylpropane 1634-04-4	Acute	Local	Inhalation	357 mg/m ³
		Long-term	Systemic	Dermal	5100 mg/kg bw/d
		Long-term	Systemic	Inhalation	178,5 mg/m ³
General population	tert-butyl methyl ether, MTBE, 2-methoxy-2- methylpropane 1634-04-4	Acute	Local	Inhalation	214 mg/m ³
		Long-term	Systemic	Oral	7,1 mg/kg bw/d
		Long-term	Systemic	Inhalation	53,6 mg/m ³
		Long-term	Systemic	Dermal	3570 mg/kg bw/d

Environmental values (PNEC)	
Environmental compartment	Threshold level
Aqua (freshwater)	5,1 mg/l
Aqua (marine water)	0,26 mg/l
Aqua (intermittent, freshwater)	4,72 mg/l
Sediment (freshwater)	23 mg/kg dwt
Sediment (marine water)	1,17 mg/kg dwt
Soil	1,43 mg/kg wet weight
STP (sewage treatment plant)	71 mg/l

8.2. Exposure controls**Appropriate engineering controls**

: Ensure adequate ventilation. Avoid all unnecessary exposure. Materials for protective clothing: GIVE GOOD RESISTANCE: nitrile rubber, PVA. GIVE POOR RESISTANCE: natural rubber, butyl rubber, neoprene, PVC, viton.

Hand protection

: Wear protective gloves.

Eye protection

: Chemical goggles or safety glasses.

Skin and body protection

: Head/neck protection. Protective clothing.



Respiratory protection	: Gas mask with filter type AX. High vapour/gas concentration: self-contained respirator.
Thermal hazard protection	: Wear thermal protective clothing, when necessary.
Environmental exposure controls	: Prevent releases. Ensure all national/local regulations are observed.
Other information	: Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid.
Colour	: Colourless.
Odour	: Camphor odour. Ether-like odour. Peppermint odour.
Odour threshold	: 0,13 ppm / 0,47 mg/m ³
Molecular weight	: 88,15 g/mol
pH	: No data available.
Melting point	: - 109°C
Freezing point	: No data available.
Boiling point	: 55°C
Flash point	: - 28°C
Critical temperature	: 224°C
Auto-ignition temperature	: 460°C
Decomposition temperature	: No data available.
Flammability (solid, gas)	: No data available.
Relative evaporation rate (butylacetate=1)	: 8,5
Relative evaporation rate (ether=1)	: 1,6
Vapour pressure @ 20°C	: 268 hPa
Vapour pressure @ 50°C	: 850 hPa
Critical pressure	: 34300 hPa
Relative vapour density at 20°C	: 3,0
Relative density	: 0,74
Relative density of saturated gas/air mixture	: 1,5
Density	: 740 kg/m ³
Solubility	: Moderately soluble in water (4,8 g/100ml). Substance floats in water. Soluble in ethanol. Soluble in ether. Soluble in gasoline.
Log Pow	: 1,06 (Experimental value)
Viscosity, kinematic	: No data available.
Viscosity, dynamic	: 0,00030 Pa.s (20°C)
Explosive properties	: No data available.
Oxidising properties	: No data available.
Explosive limits	: 1,6 - 8,5 vol % 60 - 310 g/m ³

9.2. Other information

Specific conductivity	: 16000 pS/m
Saturation concentration	: 1165 g/m ³
VOC content	: 100%
Other properties	: Gas/vapour heavier than air at 20°C. Clear. Highly volatile. Substance has neutral reaction.

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**

Stable under normal conditions of storage and use.
See Section 7, Handling and storage.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

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 : Not classified.
Based on available data, the classification criteria are not met.

tert-butyl methyl ether, MTBE, 2-methoxy-2-methylpropane (1634-04-4)	
LD50 oral rat	4000 mg/kg (Rat)
LD50 dermal rat	> 6800 mg/kg (Rat)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	85 mg/l/4h (Rat)
LC50 inhalation rat (ppm)	23576 ppm/4h (Rat)

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Not classified.
Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation : Not classified.
Based on available data, the classification criteria are not met.

Germ cell mutagenicity : Not classified.
Based on available data, the classification criteria are not met.

Carcinogenicity : Not classified.
Based on available data, the classification criteria are not met.

Reproductive toxicity : Not classified.
Based on available data, the classification criteria are not met.

Specific target organ toxicity - single exposure : Not classified.

Specific target organ toxicity - repeated exposure : Not classified.
Based on available data, the classification criteria are not met.

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

11.2. Information on other hazards

Other hazards : No data available.

SECTION 12: Ecological information**12.1. Toxicity**

Ecology - general : Classification concerning the environment: not applicable.

Ecology - air : Not classified.

Ecology - water : Mild water pollutant (surface water). Ground water pollutant. Slightly harmful to fishes (LC50(96h) 100-1000 mg/l). Slightly harmful to invertebrates (Daphnia) (EC50 (48h): 100 - 1000 mg/l). Practically non-toxic to algae (EC50 >100 mg/l). Inhibition of activated sludge.

tert-butyl methyl ether, MTBE, 2-methoxy-2-methylpropane (1634-04-4)	
LC50 fish 1	672 - 706 mg/l (LC50; 96 h; Pimephales promelas)
EC50 Daphnia 1	651 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h;

	Daphnia magna)
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12.2. Persistence and degradability

tert-butyl methyl ether, MTBE, 2-methoxy-2-methylpropane (1634-04-4)	
Persistence and degradability	Not readily biodegradable in water.

12.3. Bioaccumulative potential

tert-butyl methyl ether, MTBE, 2-methoxy-2-methylpropane (1634-04-4)	
BCF fish 1	1,5 (BCF; 672 h)
Log Pow	1,06
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500)

12.4. Mobility in soil

tert-butyl methyl ether, MTBE, 2-methoxy-2-methylpropane (1634-04-4)	
Surface tension	0,020 N/m (20 °C)

12.5. Results of PBT and vPvB assessment

tert-butyl methyl ether, MTBE, 2-methoxy-2-methylpropane (1634-04-4)	
Results of PBT assessment	Substance does not meet the criteria for PBT or vPvB in accordance with REGULATION (EC) No 1907/2006, Annex XIII.

12.6. Endocrine disrupting properties

tert-butyl methyl ether, MTBE, 2-methoxy-2-methylpropane (1634-04-4)	
Endocrine disrupting properties	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

12.7. Other adverse effects

tert-butyl methyl ether, MTBE, 2-methoxy-2-methylpropane (1634-04-4)	
Effect on ozone layer	Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). TA-Luft Klasse 5.2.5.
Effect on the global warming	No known effects from this product

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste 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. Remove to an authorized waste incinerator for solvents with energy recovery.
Additional information	: LWCA (the Netherlands): KGA category 06. Hazardous waste according to Directive 2008/98/EC.
European List of Waste (LoW) code	: 07 01 04* - other organic solvents, washing liquids and mother liquors

SECTION 14: Transport information

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



**14.1. UN number or ID number**

UN number : 2398

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) : UN 2398 Methyl tert-butyl ether, 3, II, (D/E)
Transport document description (IMDG) : UN 2398 Methyl-tert-butylether, 3, II

14.3. Transport hazard class(es)

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

14.4. Packing group

Packing group : 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
Classification code (ADR) : F1
Limited quantities (ADR) : 1
Hazard identification number : 33
Tunnel restriction code : D/E

Transport by sea

Transport regulations (IMDG) : Subject

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) : 1L
Excepted quantities (ADN) : E2
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EX, A
Ventilation (ADN) : VE01
Number of blue cones/lights (ADN) : 1
Not subject to ADN : No

Rail transport

Transport regulations (RID) : Subject
Classification code (RID) : F1
Limited quantities (RID) : 1L
Carriage prohibited (RID) : No

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**

- According to Annex XVII of the REACH Regulation (EC) No 1907/2006, Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles: **Listed**.

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	tert-butyl methyl ether, MTBE, 2-methoxy-2-methylpropane
3.a. 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	tert-butyl methyl ether, MTBE, 2-methoxy-2-methylpropane
3.b. 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	tert-butyl methyl ether, MTBE, 2-methoxy-2-methylpropane
40. 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.	tert-butyl methyl ether, MTBE, 2-methoxy-2-methylpropane

- According to Article 59(10) of the REACH Regulation (EC) No 1907/2006, Candidate List of SVHC for Authorisation: **Not listed**.
- According to Annex XIV List of the REACH Regulation (EC) No 1907/2006, List of substances subject to authorisation: **Not listed**.
- According to Annex I DIRECTIVE 2012/18/EU, Dangerous substances covered by the hazard categories: **Listed**.

Part I	List of Categories of dangerous substances			
N°	Hazard categories in accordance with Regulation (EC) No 1272/2008	Qualifying quantity (tonnes) of dangerous substances for the application of lower and upper-tier requirements		Section
12	MTBE / Flammable liquids, Categories 2	5000	50000	P5c

15.2. Chemical safety assessment

Chemical safety assessment has been carried out. In accordance with the Chemical Safety Report exposure scenario is not required.

SECTION 16: Other information

Indication of changes	: Revised safety data sheet according to Regulation (EC) No 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No 2020/878.
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.
Training advice	: THE PRODUCT IS RESTRICTED TO PROFESSIONAL USAGE ONLY and must be handled in accordance with good industrial hygiene and safety procedures. Ensure that all relevant regulations regarding explosive atmospheres, handling and storage facilities of flammable products are followed. Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out.

Relevant hazard classes and H-statements not written out in full under Sections 2 and 3:

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.

Poison centres in the EEA:	
AUSTRIA (Vienna)	+43 1 406 68 98
BELGIUM (Bruxelles)	+32 02 264 96 36
BULGARIA (Sofia)	+359 2 9301214 / +359 29301216
CROATIA (Zagreb)	+385 14 686 910
CZECH REPUBLIC (Praha)	+420 267 082 236 / +420 267 082 230 / +420 267 082 229



FRANCE (NANCY)	+ 33 3 83 85 21 92
GERMANY (Berlin)	+49-30-18412-0
GREECE (Athens)	+30 21 064 79250 / +30 21 064 79450
HUNGARY (Budapest)	+36 (1) 476 1135
LATVIA (Riga)	+371 67032600
LITHUANIA (Vilnius)	+370 682 92653
NETHERLANDS (Utrecht)	+31 88 75 585 61
POLAND (Lodz)	+48 42 2538 400
ROMANIA (Bucuresti)	+40 21 318 3606
SLOVAKIA (Bratislava)	+421 2 5465 2307
SLOVENIA (Ljubljana)	+386 1 522 1293

Abbreviations and acronyms:

SDS	: Safety Data Sheet
UN	: United Nations
EU	: European Union
EC	: European Community
EEC	: European Economic Community
CAS No	: Chemical Abstract Service number
EC No (EINECS)	: European Inventory of Existing Commercial Chemical Substances (European Chemical number: EINECS, ELINCS or NLP)
ELINCS	: European List of Notified Chemical Substances
NLP	: No-Longer Polymer
CLP	: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
ECHA	: European Chemicals Agency
REACH	: Registration, Evaluation, Authorisation and Restriction of Chemicals
PBT	: Persisten, Bioaccumulative and Toxic substance/mixture
vPvB	: Very Persisten and very Bioaccumulative substance/mixture
V/V	: percent per volume
LC50	: Lethal concentration, 50 percent
LD50	: Lethal dose, 50 percent
EC50	: Effective concentration, 50 percent
DNEL	: Derived No Effect Level
PNEC	: Predicted No Effect Concentration
ADR	: European Agreement concerning the International Carriage of Dangerous Goods by Road
RID	: European Agreement concerning the International Rule for Transport of Dangerous Goods by Rail
ADN	: European Agreement concerning the International Carriage of Dangerous Goods by inland Waterways
IMDG	: International Maritime Dangerous Goods
IATA	: International Air Transport Association
EEA	: European Economic Area

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Users are obliged to have their activities harmonized with national, regional and local regulations, which are subject to modifications, and may differ depending on location/state. Users are responsible for handling, storage and manipulation in accordance with effective laws and regulations as required to provide health and safety at work and environmental protection. Since the use of this information and the conditions of use are not within the control of HIP Petrohemija, it is the user's obligation to determine the conditions of safe use of the product.

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