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24/04/2024

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23/01/2026

Revision Number
2
Country-Language: FIN-EN

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

1.1. Product identifier

Product Name	Motor gasoline 95 E10, 98 E5, sulphur free, summer grade, winter grade; Neste Futura 95 E10, 98 E5 (BE95 E10, BE98 E5), BE95E5
Product Code(s)	13866
Safety data sheet number	13866
Other means of identification	-
Unique Formula Identifier (UFI)	D7VR-TX9V-Q81W-4GH5
Pure substance/mixture	Mixture

Contains Gasoline; Renewable hydrocarbons of vegetable oil and/or animal fat origin (naphtha type fraction); Ethyl tert-butyl ether (ETBE); 2-methoxy-2-methylbutane (TAME); 2-ethoxy-2-methylbutane (TAEF)

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

Recommended use Use as a fuel (ES 12a, ES 12b, ES 12c)

1.3. Details of the supplier of the safety data sheet

Supplier

Neste Oyj
Keilaranta 21, Espoo, P.O.B. 95, FIN-00095 NESTE, FINLAND
Tel. +358 10 45811
SDS@neste.com (chemical safety)

1.4. Emergency telephone number

Emergency Telephone :

Emergency Telephone - §45 - (EC)1272/2008	
Europe	112
Estonia	Poison information telephone number: 16662, calling from abroad: (+372) 7943 794
Finland	+358 800 147 111, +358 9 471 977, Poison Information Centre
Latvia	Valsts toksikoloģijas centrs: (+371) 6704 2473
Lithuania	Farmakologinio budrumo ir apsinuodijimų informacijos skyrius (visa para): +370 5 236 2052.
Sweden	När det är akut: 112, begär giftinformation. I mindre akuta fall 010-456 6700, Giftinformationscentralens direktnummer

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flammable liquids	Category 1 - (H224)
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Skin corrosion/irritation	Category 2 - (H315)
Germ cell mutagenicity	Category 1B - (H340)
Carcinogenicity	Category 1B - (H350)
Reproductive toxicity	Category 2 - (H361fd)
Specific target organ toxicity (single exposure)	Category 3 - (H336)
Category 3 Narcotic effects	
Aspiration hazard	Category 1 - (H304)
Hazardous to the aquatic environment - chronic	Category 2 - (H411)

2.2. Label elements

Contains Gasoline; Renewable hydrocarbons of vegetable oil and/or animal fat origin (naphtha type fraction); Ethyl tert-butyl ether (ETBE); 2-methoxy-2-methylbutane (TAME); 2-ethoxy-2-methylbutane (TAEE)



Signal word

Danger

Hazard statements

H224 - Extremely flammable liquid and vapour
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H336 - May cause drowsiness or dizziness
H340 - May cause genetic defects
H350 - May cause cancer
H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child
H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P261 - Avoid breathing vapours
P273 - Avoid release to the environment
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor
P331 - Do NOT induce vomiting
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

2.3. Other hazards

Volatile. Vapours may form explosive mixture with air. Risk of soil and ground water contamination.

This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

This product does not contain substances considered to have endocrine disrupting properties at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical name	Weight-%	REACH registration number	EC No. (Index No.)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)	Notes
Gasoline 86290-81-5	>= 78	01-2119471335-39	289-220-8	Flam. Liq. 1 (H224) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) STOT SE 3 (H336) Muta. 1B (H340) Carc. 1B (H350) Repr. 2 (H361fd) Aq. Chronic 2 (H411)	-	-	-	-
Renewable hydrocarbons of vegetable oil and/or animal fat origin (naphtha type fraction)	< 20	01-2119497828-14	940-595-2	Flam. Liq. 2 (H225) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) STOT SE 3 (H336) Repr. 2 (H361f) Aq. Chronic 2 (H411)	-	-	-	-
Methyl tert-butyl ether (MTBE) 1634-04-4	<= 22	01-2119452786-27	216-653-1	Flam. Liq. 2 (H225) Skin Irrit. 2 (H315)	-	-	-	-
Ethyl tert-butyl ether (ETBE) 637-92-3	<= 22	01-2119452785-29	211-309-7	Flam. Liq. 2 (H225) STOT SE 3 (H336)	-	-	-	-
2-methoxy-2-methylbutane (TAME) 994-05-8	<= 22	01-2119453236-41	213-611-4	Flam. Liq. 2 (H225) Acute Tox. 4 (H302) STOT SE 3 (H336)	-	-	-	-
Ethanol 64-17-5	<= 10	01-2119457610-43	200-578-6	Flam. Liq. 2 (H225) Eye Irrit. 2 (H319)	Eye Irrit. 2 :: 50%<=C<100%	-	-	-
2-ethoxy-2-methylbutane (TAEE) 919-94-8	< 10	01-2119489926-16	618-804-0	Flam. Liq. 2 (H225) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H336)	-	-	-	-
Methanol 67-56-1	< 3	01-2119433307-44	200-659-6	Flam. Liq. 2 (H225) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) STOT SE 1 (H370)	STOT SE 1 :: C>=10% STOT SE 2 :: 3%<=C<10%	-	-	-

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

Acute Toxicity Estimate

No information available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59).

Additional information

Mixture of a petroleum product, oxygenates and additives. Total aromatics at maximum: 35 %.

The gasoline component (86290-81-5) of the product contains: Benzene (CAS 71-43-2) ≤ 1 %, Toluene (CAS 108-88-3) ~ 5 - 15 %, N-Hexane (CAS 110-54-3) < 5 %.

In the 95 E10 grade total ethers max. 22 vol-%. The 98 E5 grade contains max. 5 vol-% ethanol. In the 98 E5 grade MTBE, ETBE and TAME max. 15 vol-%. Total ethers max. 15 vol-%.

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.
Inhalation	Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. If breathing is difficult, (trained personnel should) give oxygen.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.
Ingestion	ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Never give anything by mouth to an unconscious person. Get immediate medical attention.
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

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

Symptoms	Irritating to skin. May irritate eyes. Vapours in high concentrations are narcotic. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
Effects of Exposure	May cause cancer. May damage fertility. May damage the unborn child. Mutagenic effects.

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

Note to doctors	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO ₂). Water spray. Alcohol resistant foam.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	Extremely flammable liquid and vapour. Risk of ignition. Vapours may accumulate on the floor and in low-lying areas. Containers may explode when heated. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Prevent fire extinguishing water from contaminating
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surface water or the ground water system.

Hazardous combustion products Carbon dioxide (CO₂) Carbon monoxide

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid breathing vapours. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Take precautionary measures against static discharges. All equipment used when handling the product must be grounded.

For emergency responders Prevent unauthorized access. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Flash back possible over considerable distance. Vapours may accumulate in confined areas (basement, tanks, hopper/tank cars, etc.). Eliminate all ignition sources if safe to do so. Take precautionary measures against static discharges.

6.2. Environmental precautions

Environmental precautions Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches and waterways. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air). Risk of soil and ground water contamination.

6.3. Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dyke far ahead of spill to collect run-off water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Immediately start clean-up of the liquid and contaminated soil. Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers. Pay attention to the fire and health hazards caused by the product.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See Section 7 for more information. See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling The product contains volatile substances which may spread in the atmosphere. Vapours may accumulate on the floor and in low-lying areas. Keep away from heat, hot surfaces,

sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion.

Use only outdoors or in a well-ventilated area. Try to avoid product volatilization during handling and transferring. Avoid breathing vapours or mists. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. During tank operations follow special instructions (risk of oxygen displacement and hydrocarbons).

General hygiene considerations

Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Flammable liquid storage. Store in accordance with local regulations. Vapour from residual product may create a highly flammable or explosive atmosphere inside the container. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Do not store near combustible materials. Keep in properly labelled containers. Protect from direct sunlight. Store in a demarcated bunded area to prevent release to drains and/or watercourses.

7.3. Specific end use(s)

Risk Management Methods (RMM) Not applicable.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name		European Union		
Methyl tert-butyl ether (MTBE) 1634-04-4		TWA: 50 ppm TWA: 183.5 mg/m ³ STEL: 100 ppm STEL: 367 mg/m ³		
Methanol 67-56-1		TWA: 200 ppm TWA: 260 mg/m ³ *		
Chemical name	Austria	Belgium	Bulgaria	Croatia
Gasoline 86290-81-5	-	TWA: 300 ppm TWA: 903 mg/m ³ STEL: 500 ppm STEL: 1501 mg/m ³	-	TWA: 300 ppm STEL: 500 ppm
Methyl tert-butyl ether (MTBE) 1634-04-4	TWA: 50 ppm TWA: 180 mg/m ³ STEL 100 ppm STEL 360 mg/m ³	TWA: 40 ppm TWA: 146 mg/m ³ STEL: 100 ppm STEL: 367 mg/m ³	STEL: 100 ppm STEL: 367 mg/m ³ TWA: 50 ppm TWA: 183.5 mg/m ³	TWA: 50 ppm TWA: 183.5 mg/m ³ STEL: 100 ppm STEL: 367 mg/m ³ *
Ethanol	TWA: 1000 ppm	TWA: 1000 ppm	TWA: 1000 mg/m ³	TWA: 1000 ppm

64-17-5	TWA: 1900 mg/m ³ STEL 2000 ppm STEL 3800 mg/m ³	TWA: 1907 mg/m ³		TWA: 1900 mg/m ³
Methanol 67-56-1	TWA: 200 ppm TWA: 260 mg/m ³ STEL 800 ppm STEL 1040 mg/m ³ H*	TWA: 200 ppm TWA: 266 mg/m ³ STEL: 250 ppm STEL: 333 mg/m ³ D*	TWA: 200 ppm TWA: 260.0 mg/m ³ K*	TWA: 200 ppm TWA: 260 mg/m ³ *
Chemical name	Cyprus	Czech Republic	Denmark	Estonia
Gasoline 86290-81-5	-	TWA: 400 mg/m ³	-	TWA: 200 mg/m ³ STEL: 300 mg/m ³
Methyl tert-butyl ether (MTBE) 1634-04-4	STEL: 367 mg/m ³ STEL: 100 ppm TWA: 183.5 mg/m ³ TWA: 50 ppm	TWA: 100 mg/m ³ Ceiling: 200 mg/m ³	TWA: 40 ppm TWA: 144 mg/m ³ STEL: 376 mg/m ³ STEL: 100 ppm	TWA: 50 ppm TWA: 183.5 mg/m ³ STEL: 100 ppm STEL: 367 mg/m ³
Ethanol 64-17-5	-	TWA: 1000 mg/m ³ Ceiling: 3000 mg/m ³	TWA: 1000 ppm TWA: 1900 mg/m ³ STEL: 2000 ppm STEL: 3800 mg/m ³	TWA: 500 ppm TWA: 1000 mg/m ³ STEL: 1000 ppm STEL: 1900 mg/m ³
Methanol 67-56-1	* TWA: 200 ppm TWA: 260 mg/m ³	TWA: 250 mg/m ³ Ceiling: 1000 mg/m ³ D*	TWA: 200 ppm TWA: 260 mg/m ³ H* STEL: 400 ppm STEL: 520 mg/m ³	TWA: 200 ppm TWA: 250 mg/m ³ STEL: 250 ppm STEL: 350 mg/m ³ A*
Chemical name	Finland	France	Germany TRGS	Germany DFG
Methyl tert-butyl ether (MTBE) 1634-04-4	50 ppm (8h) 180 mg/m ³ (8h) 100 ppm (15 min) 360 mg/m ³ (15min) HTP 2020/FIN, EUOELV (EC/2009/161)	TWA: 50 ppm TWA: 183.5 mg/m ³ STEL: 367 mg/m ³ STEL: 100 ppm	TWA: 50 ppm TWA: 180 mg/m ³	TWA: 50 ppm TWA: 180 mg/m ³ Peak: 75 ppm Peak: 270 mg/m ³
Ethyl tert-butyl ether (ETBE) 637-92-3	5 ppm (8h) 25 mg/m ³ (8 h) HTP 2020/FIN.	-	-	-
2-methoxy-2-methylbutane (TAME) 994-05-8	20 ppm (8h) 84 mg/m ³ (8h) HTP 2020/FIN	-	-	-
Ethanol 64-17-5	1000 ppm (8h) 1900 mg/m ³ (8h) 1300 ppm (15min) 2500 mg/m ³ (15min) HTP 2020/FIN.	TWA: 1000 ppm TWA: 1900 mg/m ³ STEL: 5000 ppm STEL: 9500 mg/m ³	TWA: 200 ppm TWA: 380 mg/m ³	TWA: 200 ppm TWA: 380 mg/m ³ Peak: 800 ppm Peak: 1520 mg/m ³
Methanol 67-56-1	200 ppm (8h) 270 mg/m ³ (8h) 250 ppm (15 min) 330 mg/m ³ (15 min) HTP 2025/FIN May be absorbed through the skin.	TWA: 200 ppm TWA: 260 mg/m ³ STEL: 1000 ppm STEL: 1300 mg/m ³ *	TWA: 100 ppm TWA: 130 mg/m ³ H*	TWA: 100 ppm TWA: 130 mg/m ³ Peak: 200 ppm Peak: 260 mg/m ³ *
Chemical name	Greece	Hungary	Italy MDLPS	Italy AIDII
Gasoline 86290-81-5	-	-	-	TWA: 300 ppm STEL: 500 ppm
Methyl tert-butyl ether (MTBE) 1634-04-4	TWA: 50 ppm TWA: 183.5 mg/m ³ STEL: 100 ppm STEL: 367 mg/m ³	TWA: 50 ppm TWA: 183.5 mg/m ³ STEL: 100 mg/m ³ STEL: 367 mg/m ³	TWA: 50 ppm TWA: 183.5 mg/m ³ STEL: 100 ppm STEL: 367 mg/m ³	TWA: 50 ppm TWA: 180 mg/m ³
Ethanol 64-17-5	TWA: 1000 ppm TWA: 1900 mg/m ³	TWA: 1000 ppm TWA: 1900 mg/m ³	-	STEL: 1000 ppm STEL: 1884 mg/m ³

		STEL: 2000 ppm STEL: 3800 mg/m ³		
Methanol 67-56-1	TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 325 mg/m ³ *	TWA: 260 mg/m ³ TWA: 200 ppm b*	TWA: 200 ppm TWA: 260 mg/m ³ cute*	TWA: 200 ppm TWA: 262 mg/m ³ STEL: 250 ppm STEL: 328 mg/m ³ cute*
Chemical name	Ireland	Latvia	Lithuania	Luxembourg
Gasoline 86290-81-5	TWA: 300 ppm STEL: 500 ppm	-	STEL: 300 mg/m ³ TWA: 200 mg/m ³	-
Methyl tert-butyl ether (MTBE) 1634-04-4	TWA: 50 ppm TWA: 183.5 mg/m ³ STEL: 100 ppm STEL: 367 mg/m ³	TWA: 50 ppm TWA: 183.5 mg/m ³ STEL: 100 ppm STEL: 367 mg/m ³	STEL: 100 ppm STEL: 367 mg/m ³ TWA: 50 ppm TWA: 183.5 mg/m ³	STEL: 367 mg/m ³ STEL: 100 ppm TWA: 183.5 mg/m ³ TWA: 50 ppm
Ethanol 64-17-5	STEL: 1000 ppm	TWA: 1000 mg/m ³	STEL: 1000 ppm STEL: 1900 mg/m ³ TWA: 500 ppm TWA: 1000 mg/m ³	-
Methanol 67-56-1	TWA: 200 ppm TWA: 260 mg/m ³ STEL: 600 ppm STEL: 780 mg/m ³ Sk*	TWA: 200 ppm TWA: 260 mg/m ³ Ada*	TWA: 200 ppm TWA: 260 mg/m ³ O*	TWA: 200 ppm TWA: 260 mg/m ³ Peau*
Chemical name	Malta	Netherlands	Norway	Poland
Gasoline 86290-81-5	-	TWA: 50 ppm TWA: 240 mg/m ³ STEL: 100 ppm STEL: 480 mg/m ³	-	-
Methyl tert-butyl ether (MTBE) 1634-04-4	STEL: 367 mg/m ³ STEL: 100 ppm TWA: 183.5 mg/m ³ TWA: 50 ppm	TWA: 49 ppm TWA: 180 mg/m ³ STEL: 98 ppm STEL: 360 mg/m ³	TWA: 50 ppm TWA: 183.5 mg/m ³ STEL: 100 ppm STEL: 367 mg/m ³	STEL: 270 mg/m ³ TWA: 180 mg/m ³
Ethanol 64-17-5	-	TWA: 137 ppm TWA: 260 mg/m ³ STEL: 1000 ppm STEL: 1900 mg/m ³ H*	TWA: 500 ppm TWA: 950 mg/m ³ STEL: 625 ppm STEL: 1187.5 mg/m ³	TWA: 1900 mg/m ³
Methanol 67-56-1	skin* TWA: 200 ppm TWA: 260 mg/m ³	TWA: 100 ppm TWA: 133 mg/m ³ H*	TWA: 100 ppm TWA: 130 mg/m ³ STEL: 150 ppm STEL: 162.5 mg/m ³ H*	STEL: 300 mg/m ³ TWA: 100 mg/m ³
Chemical name	Portugal	Romania	Slovakia	Slovenia
Gasoline 86290-81-5	TWA: 300 ppm STEL: 500 ppm	-	-	-
Methyl tert-butyl ether (MTBE) 1634-04-4	TWA: 50 ppm TWA: 183.5 mg/m ³ STEL: 100 ppm STEL: 367 mg/m ³	TWA: 50 ppm TWA: 183.5 mg/m ³ STEL: 100 ppm STEL: 367 mg/m ³	TWA: 50 ppm TWA: 183.5 mg/m ³ Ceiling: 367 mg/m ³	TWA: 50 ppm TWA: 183.5 mg/m ³ STEL: 100 ppm STEL: 367 mg/m ³
Ethanol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³ STEL: 5000 ppm STEL: 9500 mg/m ³	TWA: 500 ppm TWA: 960 mg/m ³ Ceiling: 1920 mg/m ³	TWA: 960 mg/m ³ TWA: 500 ppm STEL: 1000 ppm STEL: 1920 mg/m ³
Methanol 67-56-1	TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm Cutănea*	TWA: 200 ppm TWA: 260 mg/m ³ P*	TWA: 200 ppm TWA: 260 mg/m ³ K*	TWA: 200 ppm TWA: 260 mg/m ³ STEL: 800 ppm STEL: 1040 mg/m ³ K*
Chemical name	Spain	Sweden	Switzerland	United Kingdom

Gasoline 86290-81-5	TWA: 300 ppm	NGV: 250 mg/m ³	TWA: 300 ppm TWA: 1100 mg/m ³	-
Methyl tert-butyl ether (MTBE) 1634-04-4	TWA: 50 ppm TWA: 183.5 mg/m ³ STEL: 100 ppm STEL: 367 mg/m ³	Bindande KGV: 100 ppm Bindande KGV: 367 mg/m ³ NGV: 30 ppm NGV: 110 mg/m ³	TWA: 50 ppm TWA: 180 mg/m ³ STEL: 75 ppm STEL: 270 mg/m ³	TWA: 50 ppm TWA: 183.5 mg/m ³ STEL: 100 ppm STEL: 367 mg/m ³
Ethanol 64-17-5	STEL: 1000 ppm STEL: 1910 mg/m ³	Vägledande KGV: 1000 ppm Vägledande KGV: 1900 mg/m ³ NGV: 500 ppm NGV: 1000 mg/m ³	TWA: 500 ppm TWA: 960 mg/m ³ STEL: 1000 ppm STEL: 1920 mg/m ³	TWA: 1000 ppm TWA: 1920 mg/m ³ STEL: 3000 ppm STEL: 5760 mg/m ³
Methanol 67-56-1	TWA: 200 ppm TWA: 266 mg/m ³ via dérmica*	Vägledande KGV: 250 ppm Vägledande KGV: 350 mg/m ³ NGV: 200 ppm NGV: 250 mg/m ³ H*	TWA: 200 ppm TWA: 260 mg/m ³ STEL: 400 ppm STEL: 520 mg/m ³ H*	TWA: 200 ppm TWA: 266 mg/m ³ STEL: 250 ppm STEL: 333 mg/m ³ Sk*

Biological occupational exposure limits This product, as supplied, contains materials that do not have reportable biological exposure limits or are not subject to the reporting requirements of the local jurisdiction.

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
Gasoline 86290-81-5	-	-	1300 mg/m ³ [4] [7] 1100 mg/m ³ [5] [7] 840 mg/m ³ [5] [6]
2-methoxy-2-methylbutane (TAME) 994-05-8	-	1601 mg/kg/day [4] [6]	353,3 mg/m ³ [4] [7] 88,8 mg/m ³ [4] [6]
Renewable hydrocarbons of vegetable oil and/or animal fat origin (naphtha type fraction) -	-	-	1286 mg/m ³ [4,7] 837 mg/m ³ [5,6] 1067 mg/m ³ [5,7]
Methyl tert-butyl ether (MTBE) 1634-04-4	-	5100 mg/kg/day [4] [6]	357 mg/m ³ [5] [7] 178,5 mg/m ³ [4] [6]
Ethyl tert-butyl ether (ETBE) 637-92-3	-	6767 mg/kg/day [4] [6]	2800 mg/m ³ [4] [7] 105 mg/m ³ [5] [6] 352 mg/m ³ [4] [6]
Ethanol 64-17-5	-	343 mg/kg/day [4] [6]	950 mg/m ³ [4] [6] 1900 mg/m ³ [5] [7]
2-ethoxy-2-methylbutane (TAEF) 919-94-8	-	364 mg/kg bw/day [4] [6]	101 mg/m ³ [4] [6] 402 mg/m ³ [4] [7] 119 mg/m ³ [5] [6]
Methanol 67-56-1	-	20 mg/kg/day [4] [6] [7]	130 mg/m ³ [4] [5] [6] [7]

Notes

- [1]
- [4] Systemic health effects.
- [5] Local health effects.
- [6] Long term.
- [7] Short term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
Gasoline 86290-81-5	-	-	1200 mg/m ³ [4] [7] 640 mg/m ³ [5] [7] 180 mg/m ³ [5] [6]
2-methoxy-2-methylbutane (TAME) 994-05-8	1 mg/kg bw/day [4] [6]	961 mg/kg/day [4] [6] 1 mg/kg/day [4] [6]	212 mg/m ³ [4] [7] 26,5 mg/m ³ [4] [6]
Renewable hydrocarbons of vegetable oil and/or animal fat origin (naphtha type fraction) -	-	-	1152 mg/m ³ [4,7] 179 mg/m ³ [5,6] 640 mg/m ³ [5,7]
Methyl tert-butyl ether (MTBE) 1634-04-4	7,1 mg/kg/day [4] [6]	3570 mg/kg/day [4] [6]	214 mg/m ³ [5] [7] 53,6 mg/m ³ [4] [6]
Ethyl tert-butyl ether (ETBE) 637-92-3	12,5 mg/kg/day [4] [6]	4060 mg/kg/day [4] [6]	1680 mg/m ³ [4] [7] 63 mg/m ³ [5] [6] 105 mg/m ³ [4] [6]
Ethanol 64-17-5	87 mg/kg/day [4] [6]	206 mg/kg/day [4] [6]	950 mg/m ³ [5] [7] 114 mg/m ³ [4] [6]
2-ethoxy-2-methylbutane (TAEE) 919-94-8	0.83 mg/kg bw/day [4] [6]	-	30 mg/m ³ [4] [6] 241 mg/m ³ [4] [7] 72 mg/m ³ [5] [6]
Methanol 67-56-1	4 mg/kg/day [4] [6] [7]	4 mg/kg/day [4] [6] [7]	26 mg/m ³ [4] [5] [6] [7]

Notes

[4] Systemic health effects.

[5] Local health effects.

[6] Long term.

[7] Short term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
2-methoxy-2-methylbutane (TAME) 994-05-8	0.51 mg/L	-	0.0339 mg/L	-	-
Methyl tert-butyl ether (MTBE) 1634-04-4	5.1 mg/L	-	0.26 mg/L	-	-
Ethyl tert-butyl ether (ETBE) 637-92-3	0.51 mg/L	-	0.017 mg/L	-	-
Ethanol 64-17-5	0.96 mg/L	-	0.79 mg/L	2.75 mg/L	-
2-ethoxy-2-methylbutane (TAEE) 919-94-8	2.2 mg/L	1.43 mg/L	0.22 mg/L	-	-
Methanol 67-56-1	20.8 mg/L	1540 mg/L	2.08 mg/L	-	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
2-methoxy-2-methylbutane (TAME) 994-05-8	2.99 mg/kg sediment dw	0.199 mg/kg sediment dw	25 mg/L	0.265 mg/kg soil dw	-
Methyl tert-butyl ether (MTBE) 1634-04-4	23 mg/kg sediment dw	1.17 mg/kg sediment dw	71 mg/L	1.56 mg/kg soil dw	-
Ethyl tert-butyl ether (ETBE) 637-92-3	28.5 mg/kg sediment dw	1.45 mg/kg sediment dw	12.5 mg/L	2.41 mg/kg soil dw	-
Ethanol 64-17-5	3.6 mg/kg, dw	2.9 mg/kg, dw	580 mg/l	0.63 mg/kg, dw	380 mg/kg
2-ethoxy-2-methylbutane (TAE)E) 919-94-8	204 mg/kg sediment dw	20.4 mg/kg sediment dw	483 mg/L	39.5 mg/kg soil dw	6670 g/kg food
Methanol 67-56-1	77 mg/kg sediment dw	7.7 mg/kg sediment dw	100 mg/L	100 mg/kg soil dw	-

8.2. Exposure controls

Engineering controls

Use only in well-ventilated areas. Use personal protective equipment and/or local ventilation when needed. During tank operations follow special instructions (risk of oxygen displacement and hydrocarbons).

Personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles). Face shield when needed.

Hand protection

Wear protective gloves. It is recommended that gloves are made of the following material: Nitrile rubber. Wear suitable gloves tested to EN 374. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Change protective gloves regularly.

Skin and body protection

Protective clothing when needed. Wear anti-static protective clothing if there is a risk of ignition from static electricity.

Respiratory protection

Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Wear a respirator fitted with the following cartridge: Gas filter. AX. Gas and combination filter cartridges must comply with EN 14387. Filter must be changed often enough. At high concentrations a breathing apparatus must be used (self-contained or fresh air hose breathing apparatus).

Thermal hazards

No information available.

Environmental exposure controls

Store in a demarcated bunded area to prevent release to drains and/or watercourses.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Mobile liquid
Physical state	Liquid
Colour	clear
Odour	Hydrocarbons, Ethers
Odour threshold	-

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	< -20 °C	
Boiling point or initial boiling point and boiling range	20 - 210 °C	
Flammability	H224	
Lower and upper explosion limit/flammability limit		
Lower explosion limit	1,4 % (calculated)	
Upper explosion limit	8,1 % (calculated)	
Flash point	< 0 °C	
Autoignition temperature	> 280 °C	Estimated value
Decomposition temperature		
SADT (°C)	No data available	
pH	No data available	
pH (as aqueous solution)	No data available	
Kinematic viscosity	< 1 mm ² /s @ 38 °C	
Dynamic viscosity	No data available	
Solubility	No data available	
Water solubility	Slightly soluble in water. The product contains substances which are water-soluble and may spread in water systems: MTBE: 41.9 g/l, ETBE: 16.4 g/l, TAME: 10.4 g/l, TAEE: 3.9 g/l. Ethanol: Completely soluble in water. Methanol: Completely soluble in water	
Partition coefficient n-octanol/water (log value)	Hydrocarbons: log Kow: ≥ 4, MTBE log Kow: 1.06, ETBE log Kow: 1.48, TAME log Kow: 1.55, TAEE log Kow: 2.95-3.35., ethanol, log Kow: -0.35., methanol, log Kow: -0.77	
Vapour pressure	45 - 90 kPa	@ 38°C
Density and/or relative density	0,72 - 0,77	@ 15 °C
Bulk density	No data available	
Liquid Density	No data available	
Relative vapour density	> 3	(Air = 1.0)
Particle characteristics		
Particle Size	Not applicable	
Particle Size Distribution	Not applicable	

9.2. Other information

9.2.1. Information with regards to physical hazard classes

No information available

Explosives

No

Explosive properties

Not considered to be explosive

Oxidising properties

Does not meet the criteria for classification as oxidising

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability

Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.
Sensitivity to static discharge Yes.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks.

10.5. Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products None under normal use conditions.

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Acute toxicity GHS acute toxicity categories 1-5: Based on available data, the classification criteria are not met

Numerical measures of toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Gasoline	> 5000 mg/kg, Rat (OECD TG 401)	> 2000 mg/kg, Rabbit (OECD TG 402)	> 5610 mg/m ³ , Rat (4h) (OECD TG 403)
Renewable hydrocarbons of vegetable oil and/or animal fat origin (naphtha type fraction)	> 5000 mg/kg, (OECD TG 401)	> 2000 mg/kg (OECD TG 402)	> 5610 mg/m ³ (OECD TG 403)
Methyl tert-butyl ether (MTBE)	> 2 000 mg/kg bw, Rat (OECD 401)	> 2 000 mg/kg bw, Rat (OECD 402)	85 mg/L (Rat) 4 h (OECD 403)
Ethyl tert-butyl ether (ETBE)	> 2000 mg/kg, Oral, Rat (OECD 401)	> 2 000 mg/kg bw, Rabbit (OECD 402)	> 5.88 mg/L air, Rat, 4 h (OECD 403)
2-methoxy-2-methylbutane (TAME)	1602 - 2417 mg/kg bw, Rat (OECD 401)	> 2000 mg/kg, Rabbit (OECD 402)	> 5400 mg/m ³ , Rat (4h) (OECD 403)
Ethanol	10 470 mg/kg bw, Rat (OECD 401)	15800 mg/kg (Rabbit)	117 mg/L (Rat) 4 h (OECD 403)
2-ethoxy-2-methylbutane (TAEE)	> 2 000 mg/kg bw, Rat	> 2 000 mg/kg bw, Rabbit (OECD 402)	> 23.2 mg/L air (analytical), Rat
Methanol	1 187 mg/kg, Rat	17 100 mg/kg, Rabbit	43 700 mg/m ³ (6h), Rat

Delayed and immediate effects as well as chronic effects from short and long-term exposure

- Skin corrosion/irritation** Causes skin irritation. The product irritates mucous membranes and may cause abdominal discomfort if swallowed. May cause respiratory irritation.
- Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation** Based on available data, the classification criteria are not met. (OECD 406, 429, EU B.6, B.43, EPA OTS 798.4100).
- Germ cell mutagenicity** May cause genetic defects. Contains a known or suspected mutagen. Gasoline (CAS 86290-81-5):. (benzene > 0.1%). Classification based on data available for ingredients.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as mutagenic.

Chemical name	European Union
Gasoline	Muta. 1B

- Carcinogenicity** May cause cancer. Contains a known or suspected carcinogen. Gasoline (CAS 86290-81-5):. (benzene > 0.1%). Classification based on data available for ingredients.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	European Union
Gasoline	Carc. 1B

- Reproductive toxicity** Suspected of damaging the unborn child. Suspected of damaging fertility. Contains a known or suspected reproductive toxin. (n-hexane, toluene > 3%). Classification based on data available for ingredients.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Chemical name	European Union
Gasoline	Repr. 2
Renewable hydrocarbons of vegetable oil and/or animal fat origin (naphtha type fraction)	Repr. 2

- STOT - single exposure** May cause drowsiness or dizziness. May cause nausea, headache, dizziness and intoxication. Anaesthetic in high concentrations.

- STOT - repeated exposure** Based on available data, the classification criteria are not met.

- Aspiration hazard** May be fatal if swallowed and enters airways. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

- Endocrine disrupting properties** This product does not contain substances considered to have endocrine disrupting properties at levels of 0.1% or higher.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Gasoline	EL50, 72 h: 3,1 mg/l, Pseudokirchneriella subcapitata NOELR, 72 h: 0,5 mg/l, Pseudokirchneriella subcapitata WAF (OECD 201)	LL50, 96 h: 8,2 mg/l, Pimephales promelas (Fat-head Minnow) LL50, 96 h: 10 mg/l, Oncorhynchus mykiss (Rainbow trout) WAF (EPA 66013-75-009, OECD 203)	-	EL50, 48 h: 4,5 mg/l, Daphnia magna NOELR, 48 h: 0,5 mg/l, Daphnia magna parWAF (OECD 202) EL50, 21 d: 10 mg/l, Daphnia magna NOELR, 21 d: 2,6 mg/l, Daphnia magna (OECD 211)
Renewable hydrocarbons of vegetable oil and/or animal fat origin (naphtha type fraction)	EL50 (72h): 3.1 mg/L NOELR (72h): 0.5 mg/L OECD TG 201, Raphidocelis subcapitata	LL50 (96h): 8.2 mg/L EPA 66013-75-009, Pimephales promelas LL50 (96h): 10 mg/L OECD TG 203, Oncorhynchus mykiss	EL50 (40h): 15.41 mg/L QSAR, Tetrahymena pyriformis	EL50 (48h): 4.5 mg/L OECD TG 202, Daphnia magna NOELR (21d): 2.6 mg/L OECD TG 211, Daphnia magna
Methyl tert-butyl ether (MTBE)	IC ₂₀ , 96 hours: 103 mg/l, Algae IC ₅₀ , 96 hours: 491 mg/l, Algae (ASTM E1218-90)	LC ₅₀ , 96 hours: 574 - 672 mg/l, Fish (OECD 203, US EPA 1981) NOEC, 21 days: 62 mg/l, Fish (OECD 229, EPA OPPTS 890.1350)	-	EC ₅₀ , 48 hours: 472 mg/l, (EPA OPPTS 850.1010) EC ₈₀ , 96 hours: 44 - 200 mg/l, (OECD 202, EPA OTS 797.1930, EPA OPPTS 850.1035) NOEC, 21 days: 51 mg/l, (EPA:OPPTS 850.1300) NOEC, 28 days: 26 mg/l, (EPA OPPTS 850.1350)
Ethyl tert-butyl ether (ETBE)	EC ₅₀ , 72 hours: 1100 mg/l, Algae NOEC, 72 hours: 7,5 mg/l, Algae(OECD 201)	LC ₅₀ , 96 hours: > 974,1 mg/l,(OECD 203) NOEC, 31 days: 299 mg/l,(ASTM E1241-92)	-	EC ₅₀ , 48 hours: 110 mg/l,(OECD 202) EC ₅₀ , 96 hours: 37 mg/l,(EPA OTS 797.1930) NOEC, 21 days: 51 mg/l, LOEC, 21 days: 100 mg/l,(EPA OPPTS 850.1300) NOEC, 28 days: 3,4 mg/l,(EPA OPPTS 850.1350)
2-methoxy-2-methylbutane (TAME)	EL50, 72 hours: 230 - 780 mg/l Algae NOEC, 72 hours: 77 mg/l Algae (EU C.3)	LC ₅₀ , 96 hours: 574 - 580 mg/l, Fish(OECD 203, EPA OTS 797.1400) IC ₂₀ , 30 days: 279 mg/l,	EL10, 16 hours: 25 mg/l, Micro-organisms (wastewater sludge) EL50, 16 hours: 510 mg/l, Micro-organisms	LC ₅₀ , 96 hours: 14 mg/l,(EPA OTS 797.1930) EL50, 48 hours: 100 mg/l,(EPA OTS 797.1300)

		Fish IC25, 30 days: 308 mg/l, Fish(ASTM E1241-92)	(wastewater sludge) NOEC, 16 hours: 78 mg/l, Micro-organisms (wastewater sludge) (ISO 10712)	NOEC, 28 days: 3,39 mg/l,(EPA OPPTS 850.1350) NOEC, 21 days: 51 mg/l LOEC, 21 days: 100 mg/l,(EPA OPPTS 850.1300)
Ethanol	EC ₅₀ , 3 days: 275 mg/l, EC10, 3 days: 11,5 mg/l,Chlorella vulgaris(OECD 201)	LC ₅₀ , 96 hours: 14,2 mg/l, Pimephales promelas (Fat-head Minnow)(US EPA E03-05) NOEC, 120 hours: 250 mg/l,Danio rerio (OECD 212)	-	LC ₅₀ , 48 hours: 5012 mg/l, Freshwater invertebratesCeriodaphni a dubia(ASTM E729-80) EC ₅₀ , 48 hours: 857 mg/l, Marinewater invertebrates NOEC, 10 days: 2 mg/l,(Environ. Toxicol. Chem., 1984, 3, 425-434)
2-ethoxy-2-methylbutane (TAE)	EC ₅₀ , 72 hours: 160 mg/l, Algae NOEC, 72 hours: 36 mg/l, Algae(OECD 211)	LC ₅₀ , 96 hours: 240 mg/l, Fish (OECD 203) IC ₂₀ , 31 days: 279 mg/l, Fish IC25, 31 days: 308 mg/l, Fish(ASTM E1241-92) NOEC, 31 days: 140 mg/l, Fish Estimated value.	EC10, 16 hours: > 483 mg/l, Micro-organisms (wastewater sludge)(German Water Hazard Classification Scheme, ISO 10712)	EC ₅₀ , 48 hours: 143 mg/l,(OECD 202) NOEC, 21 days: 22 mg/l,(OECD 211)
Methanol	EC50 (96h): ca. 22000 mg/L (Selenastrum capricornutum)	LC50 (96h): 28100 mg/L (Pimephales promelas) LC50 (96h): 20100 mg/L (Oncorhynchus mykiss) LC50 (96h): 15400 mg/L (Lepomis macrochirus)	EC 50: 19800 mg/L (activated sludge) IC50: >1000 mg/L (activated sludge) IC50: 880 mg/L (Nitrosamonas)	EC50 (48h): 18000 mg/L (Daphnia magna) EC50 (48h): > 10000 mg/L (Daphnia magna)

12.2. Persistence and degradability

Persistence and degradability

The product contains volatile substances which may spread in the atmosphere. Can be photodegraded in the atmosphere.

No significant reaction in water.

Gasoline (86290-81-5)

Method	Exposure time	Value	Results
OECD Test No. 301F: Ready Biodegradability: Manometric Respirometry Test (TG 301 F) (ISO/DIS 14593)			Inherently biodegradable.

Methyl tert-butyl ether (MTBE) (1634-04-4)

Method	Exposure time	Value	Results
OECD Test No. 301D: Ready Biodegradability: Closed Bottle Test (TG 301 D)			Not readily biodegradable

Ethyl tert-butyl ether (ETBE) (637-92-3)

Method	Exposure time	Value	Results
OECD Test No. 301D: Ready			Not readily biodegradable

Biodegradability: Closed Bottle Test (TG 301 D)			
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2-methoxy-2-methylbutane (TAME) (994-05-8)

Method	Exposure time	Value	Results
OECD Test No. 301D: Ready Biodegradability: Closed Bottle Test (TG 301 D)			Not readily biodegradable

Ethanol (64-17-5)

Method	Exposure time	Value	Results
	14 days	89 %	Rapidly biodegradable

2-ethoxy-2-methylbutane (TAEE) (919-94-8)

Method	Exposure time	Value	Results
OECD Test No. 301D: Ready Biodegradability: Closed Bottle Test (TG 301 D)			Not readily biodegradable

Methanol (67-56-1)

Method	Exposure time	Value	Results
			Rapidly biodegradable

12.3. Bioaccumulative potential

Bioaccumulation May bioaccumulate.

Component Information

Chemical name	Partition coefficient
Gasoline	Hydrocarbons: log Kow: ≥ 4
Methyl tert-butyl ether (MTBE)	1.06
Ethyl tert-butyl ether (ETBE)	1.48
2-methoxy-2-methylbutane (TAME)	1.55
Ethanol	-0.35
2-ethoxy-2-methylbutane (TAEE)	2.95-3.35
Methanol	-0.77

12.4. Mobility in soil

Mobility in soil Volatile. Volatilization is the fastest and most dominant elimination process in surface water and soil. Product can penetrate soil until reaching ground water, where the most soluble components will spread. The product contains substances which are bound to particulate matter and are retained in soil.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

Chemical name	PBT and vPvB assessment
Gasoline	Not PBT/vPvB
Ethanol	Not PBT/vPvB
Methanol	Not PBT/vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties This product does not contain substances considered to have endocrine disrupting

properties at levels of 0.1% or higher.

12.7. Other adverse effects No information available.

Other adverse effects No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Dispose of this material and its container to hazardous or special waste collection point. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Product residues retained in emptied containers can be hazardous.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

SECTION 14: Transport information

IATA

14.1 UN number or ID number 1203
14.2 UN proper shipping name Gasoline
14.3 Transport hazard class(es) 3
14.4 Packing group II
14.5 Environmental hazards Yes
14.6 Special precautions for user .

IMDG

14.1 UN number or ID number 1203
14.2 UN proper shipping name Gasoline
14.3 Transport hazard class(es) 3
14.4 Packing group II
14.5 Environmental hazard Marine pollutant
14.6 Special precautions for user .
14.7 Maritime transport in bulk according to IMO instruments . Marpol Annex I

RID

14.1 UN number or ID number 1203
14.2 UN proper shipping name Gasoline
14.3 Transport hazard class(es) 3
14.4 Packing group II
14.5 Environmental hazard Yes
14.6 Special precautions for user .
Classification code 33

ADR

14.1 UN number or ID number 1203
14.2 UN proper shipping name Gasoline
14.3 Transport hazard class(es) 3
14.4 Packing group II
14.5 Environmental hazard Yes

14.6 Special precautions for user

Classification code 33
Tunnel restriction code (D/E)

SECTION 15: Regulatory information

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

National regulations

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
Gasoline - 86290-81-5	28. 29. 75.	-
Methyl tert-butyl ether (MTBE) - 1634-04-4	75.	-
Methanol - 67-56-1	69. 75.	-

Persistent Organic Pollutants

Not applicable

Chemical name	European Export/Import Restrictions per (EC) 649/2012 - Annex Number
Gasoline - 86290-81-5	Contains benzene as a constituent > 0.1 % (CAS (71-43-2)), which is listed in Annex I, Part 1.

Ozone-depleting substances (ODS) regulation (EC) 2024/590

Not applicable

Other Regulations

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). Classification according to Regulation (EC) No. 1272/2008 [CLP].

15.2. Chemical safety assessment

Chemical Safety Report

Chemical Safety Assessments have been carried out for these substances

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of any hazard and/or precautionary statements referred to under Sections 2-15

- H224 - Extremely flammable liquid and vapour
- H225 - Highly flammable liquid and vapour
- H301 - Toxic if swallowed
- H302 - Harmful if swallowed
- H304 - May be fatal if swallowed and enters airways
- H311 - Toxic in contact with skin
- H315 - Causes skin irritation
- H319 - Causes serious eye irritation
- H331 - Toxic if inhaled
- H336 - May cause drowsiness or dizziness
- H340 - May cause genetic defects
- H350 - May cause cancer
- H361d - Suspected of damaging the unborn child
- H361f - Suspected of damaging fertility
- H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child
- H370 - Causes damage to organs
- H372 - Causes damage to organs through prolonged or repeated exposure
- H373 - May cause damage to organs through prolonged or repeated exposure
- H411 - Toxic to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitisers		

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method
Flammable liquids	On basis of test data

Supersedes date 24/04/2024

Revision date 23/01/2026

Reason for revision

Updated, sections: 1-3, 8, 11-12, 15-16.

Substance identity REACH registration number Change in the mixture classification UFI

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Product Name Gasoline
REACH registration number 01-2119471335-39
EC No. (Index No.) 289-220-8
CAS No. 86290-81-5

Section 1 - Title

Title ES 12a - Use as a fuel ; Industrial
Environmental release category(ies) ERC7 - Use of functional fluid at industrial site
Specific Environmental Release Category ESVOC SPERC 7.12a.v4
Process category(ies) PROC 1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
PROC 2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC 8a Transfer of substance or mixture (charging and discharging) at nondedicated facilities
PROC 8b Transfer of substance or mixture (charging and discharging) at dedicated facilities
PROC16 Use of fuels
PROC 28 Manual maintenance (cleaning and repair) of machinery

(Closed systems - Level I)

Revision Number 2025_1
Product Name Gasoline
Processes, tasks, activities covered Covers the use as a fuel (or fuel additives and additive components) within closed or contained systems, including incidental exposures during activities associated with its transfer, use, equipment maintenance and handling of waste.

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Amounts used

Type Fraction of EU tonnage used in region
Value 1,0

Type Regional use tonnage
Value 6 314 000
Units t(ons)/year

Type Fraction of regional tonnage used locally
Value 0,2

Type Annual site tonnage
Value 1 500 000
Units t(ons)/year

Type Maximum daily site tonnage
Value 5000,0

Units t(ons)/day

Product characteristics

Remarks Substance is complex UVCB Predominantly hydrophobic

Common practices vary across sites thus conservative process release estimates used.

Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	300 d/y
Release fraction to air from process (initial release prior to RMM)	1
Release fraction to wastewater from process (initial release prior to RMM)	0,002
Release fraction to soil from process (initial release prior to RMM)	0,001

Conditions and measures related to municipal sewage treatment plant

Type	Not applicable as there is no release to wastewater
Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	0 %
Removal efficiency (total)	97,9 %
Remarks	Maximum allowable site tonnage (MSafe) based on release following total wastewater treatment removal: 5110000 kg/d.

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Technical onsite conditions and measures to reduce or limit discharges, air emissions

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater sediment No wastewater treatment required
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Waste management

Air	Treat air emission to provide a typical removal efficiency of 90 %.
Water	Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of >= 97,9 %. If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of >= 97,9 %.
Soil	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed

Conditions and measures related to external recovery of waste

This substance is consumed during use and no waste of the substance is generated

Conditions and measures related to external treatment of waste for disposal

Combustion emissions limited by required exhaust emission controls. Combustion emissions considered in regional exposure assessment. External treatment and disposal of waste should comply with applicable local and/or national regulations

Section 2.2 - Control of worker exposure

Control of worker exposure	
Covers concentrations up to	<= 100 %
Remarks	Covers percentage benzene in the final product up to < 1 %.
Physical form of product	Liquid
Vapour pressure	> 10 kPa
Temperature associated to vapour pressure	STP
Use frequency	Covers exposure up to 8 h/d. (unless stated differently)
Operational conditions	Assumes a good basic standard of occupational hygiene is implemented

	<p>Covers use at ambient temperatures (unless stated differently)</p> <p>General measures (skin irritants) Ensure that direct skin contact is avoided Identify potential areas for indirect skin contact. Wear suitable gloves tested to EN 374 Clear spills immediately Wash off any skin contamination immediately. For further specification, refer to section 8 of the SDS</p> <p>General measures (carcinogens) Consider technical advances and process upgrades (including automation) for the elimination of releases. Minimise exposure using measures such as closed systems, dedicated facilities and suitable general/local exhaust ventilation. Drain down and flush system prior to equipment break-in or maintenance Access to work area only for authorised persons. Wear chemically resistant gloves (tested to EN 374) in combination with 'basic' employee training Wear suitable coveralls to prevent exposure to the skin Wear respiratory protection when its use is identified for certain contributing scenarios. For further specification, refer to section 8 of the SDS Clear spills immediately Dispose of this material and its container to hazardous or special waste collection point Ensure safe systems of work or equivalent arrangements are in place to manage risks. Ensure control measures are regularly inspected and maintained Consider the need for risk based health surveillance.</p> <p>General measures (flammability) For measures to control risks from physicochemical properties, refer to main body of the SDS, section 7 and/or 8.</p> <p>General measures (aspiration hazard) Do not ingest. If swallowed then seek immediate medical assistance</p>
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Process category(ies)	Bulk transfers; Dedicated facility (PROC_8b)
Operational conditions	Ensure material transfers are under containment or extract ventilation

Process category(ies)	Drum/batch transfers; Dedicated facility (PROC_8b)
Operational conditions	Ensure material transfers are under containment or extract ventilation

Process category(ies)	General exposures; Closed systems (PROC_2, PROC_1)
Operational conditions	Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour) Handle substance within a closed system Sample via a closed loop or other system to avoid exposure

Process category(ies)	Use of fuels; Closed systems (PROC_16)
Operational conditions	Handle substance within a closed system

Process category(ies)	Equipment cleaning and maintenance (PROC_8a, PROC_28)
Operational conditions	Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour) Drain down and flush system prior to equipment break-in or maintenance Additional good practice advice Obligations according to Article 37(4) of REACH do not apply. Wear suitable coveralls to prevent exposure to the skin Clear spills immediately

Process category(ies)	Storage (PROC_2, PROC_1)
Operational conditions	Store substance within a closed system

Section 3 - Exposure estimation

Calculation method

Environment

The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model

Health

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated

Section 4 - Guidance to check compliance with the exposure scenario

Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination

Further details on scaling and control technologies are provided in SpERC factsheet

(<https://www.esig.org/reach-ges/environment/#factsheets>).

Health

Predicted exposures are not expected to exceed the DN(M)EL when the risk management measures/operational conditions outlined in section 2 are implemented

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels

Available hazard data does not enable the derivation of a DNEL for carcinogenic effects

Available hazard data do not enable the derivation of a DNEL for aspiration effects.

Available hazard data does not enable the derivation of a DNEL for dermal irritant effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Product Name Gasoline
REACH registration number 01-2119471335-39
EC No. (Index No.) 289-220-8
CAS No. 86290-81-5

Section 1 - Title

Title ES 12b - Use as a fuel ; Professional
Environmental release category(ies) ERC 9a Widespread use of functional fluid (indoor)
ERC 9b Widespread use of functional fluid (outdoor)
Specific Environmental Release Category ESVOC SPERC 9.12b.v3
Process category(ies) PROC 1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
PROC 2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC 8a Transfer of substance or mixture (charging and discharging) at nondedicated facilities
PROC 8b Transfer of substance or mixture (charging and discharging) at dedicated facilities
PROC16 Use of fuels
PROC 28 Manual maintenance (cleaning and repair) of machinery

(Closed systems)
Revision Number 2025_1
Product Name Gasoline
Processes, tasks, activities covered Covers the use as a fuel (or fuel additives and additive components) within closed or contained systems, including incidental exposures during activities associated with its transfer, use, equipment maintenance and handling of waste.

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Amounts used

Type Fraction of EU tonnage used in region
Value 0,1

Type Regional use tonnage
Value 734 600
Units t(ons)/year

Type Fraction of regional tonnage used locally
Value 0,0005

Type Annual site tonnage
Value 367
Units t(ons)/year

Type Maximum daily site tonnage
Value 1
Units t(ons)/day

Product characteristics

Remarks Substance is complex UVCB Predominantly hydrophobic

Common practices vary across sites thus conservative process release estimates used.

Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	365 d/y
Release fraction to air from wide dispersive use (regional only)	0,5
Release fraction to wastewater from wide dispersive use	0,0001
Release fraction to soil from wide dispersive use (regional only)	0,025

Conditions and measures related to municipal sewage treatment plant

Type	Not applicable as there is no release to wastewater
Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	96,95 %
Removal efficiency (total)	96,95 %
Remarks	Maximum allowable site tonnage (MSafe) based on release following total wastewater treatment removal: 89700 kg/d.

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Technical onsite conditions and measures to reduce or limit discharges, air emissions

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater No wastewater treatment required
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Waste management

Air	Treat air emission to provide a typical removal efficiency of 90 %.
Water	Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of >= 0 %. If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of >= 0 %.
Soil	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed

Conditions and measures related to external recovery of waste

This substance is consumed during use and no waste of the substance is generated

Conditions and measures related to external treatment of waste for disposal

Combustion emissions limited by required exhaust emission controls. Combustion emissions considered in regional exposure assessment. External treatment and disposal of waste should comply with applicable local and/or national regulations

Section 2.2 - Control of worker exposure

Control of worker exposure	
Covers concentrations up to	<= 100 %
Remarks	Covers percentage benzene in the final product up to < 1 %.
Physical form of product	Liquid
Vapour pressure	> 10 kPa
Temperature associated to vapour pressure	STP
Use frequency	Covers exposure up to 8 h/d. (unless stated differently)
Operational conditions	Assumes a good basic standard of occupational hygiene is implemented Covers use at ambient temperatures (unless stated differently)

	<p>General measures (skin irritants) Ensure that direct skin contact is avoided Identify potential areas for indirect skin contact. Wear suitable gloves tested to EN 374 Clear spills immediately Wash off any skin contamination immediately. For further specification, refer to section 8 of the SDS</p> <p>General measures (carcinogens) Consider technical advances and process upgrades (including automation) for the elimination of releases. Minimise exposure using measures such as closed systems, dedicated facilities and suitable general/local exhaust ventilation. Drain down and flush system prior to equipment break-in or maintenance Access to work area only for authorised persons. Wear chemically resistant gloves (tested to EN 374) in combination with 'basic' employee training Wear suitable coveralls to prevent exposure to the skin Wear respiratory protection when its use is identified for certain contributing scenarios. For further specification, refer to section 8 of the SDS Clear spills immediately Dispose of this material and its container to hazardous or special waste collection point Ensure safe systems of work or equivalent arrangements are in place to manage risks. Ensure control measures are regularly inspected and maintained Consider the need for risk based health surveillance.</p> <p>General measures (flammability) For measures to control risks from physicochemical properties, refer to main body of the SDS, section 7 and/or 8.</p> <p>General measures (aspiration hazard) Do not ingest. If swallowed then seek immediate medical assistance</p>
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Process category(ies)	Bulk transfers; Dedicated facility (PROC_8b)
Operational conditions	Ensure material transfers are under containment or extract ventilation

Process category(ies)	Drum/batch transfers; Dedicated facility (PROC_8b)
Operational conditions	Ensure material transfers are under containment or extract ventilation

Process category(ies)	Refuelling (PROC_8b)
Operational conditions	Ensure material transfers are under containment or extract ventilation

Process category(ies)	General exposures; Closed systems (PROC_2, PROC_1)
Operational conditions	Handle substance within a closed system Sample via a closed loop or other system to avoid exposure

Process category(ies)	Use of fuels; Closed systems (PROC_16)
Operational conditions	Handle substance within a closed system

Process category(ies)	Equipment cleaning and maintenance (PROC_8a, PROC_28)
Operational conditions	Covers use up to 4 h/d. Drain down and flush system prior to equipment break-in or maintenance Wear a respirator conforming to EN140. Additional good practice advice Obligations according to Article 37(4) of REACH do not apply. Wear suitable coveralls to prevent exposure to the skin Clear spills immediately

Process category(ies)	Storage (PROC_2, PROC_1)
Operational conditions	Store substance within a closed system

Section 3 - Exposure estimation

Calculation method

Environment

The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model

Health

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated

Section 4 - Guidance to check compliance with the exposure scenario

Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination

Further details on scaling and control technologies are provided in SpERC factsheet

(<https://www.esig.org/reach-ges/environment/#factsheets>).

Health

Predicted exposures are not expected to exceed the DN(M)EL when the risk management measures/operational conditions outlined in section 2 are implemented

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels

Available hazard data does not enable the derivation of a DNEL for carcinogenic effects

Available hazard data do not enable the derivation of a DNEL for aspiration effects.

Available hazard data does not enable the derivation of a DNEL for dermal irritant effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Product Name Gasoline
REACH registration number 01-2119471335-39
EC No. (Index No.) 289-220-8
CAS No. 86290-81-5

Section 1 - Title

Title ES 12c - Use as a fuel ; Consumer
Environmental release category(ies) ERC 9a Widespread use of functional fluid (indoor)
ERC 9b Widespread use of functional fluid (outdoor)
Specific Environmental Release Category ESVOC SPERC 9.12c.v3
Product category(ies) PC13 - Fuels
Revision Number 2025_1
Product Name Gasoline
Processes, tasks, activities covered Covers consumer uses in liquid fuels

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Amounts used
Type Fraction of EU tonnage used in region
Value 0,1

Type Regional use tonnage
Value 6 303 000
Units t(ons)/year

Type Fraction of regional tonnage used locally
Value 0,0005

Type Annual site tonnage
Value 3151
Units t(ons)/year

Type Maximum daily site tonnage
Value 8,6
Units t(ons)/day

Product characteristics
Remarks Substance is complex UVCB Predominantly hydrophobic

Other operational conditions of use affecting environmental exposure
Type Continuous release
Emission days 365 d/y
Release fraction to air from wide dispersive use (regional only) 0,4
Release fraction to wastewater from wide dispersive use 0,00002
Release fraction to soil from wide dispersive use (regional only) 0,005

Conditions and measures related to municipal sewage treatment plant

Type	Not applicable as there is no release to wastewater
Assumed domestic sewage treatment plant flow	0 m3/d
Removal efficiency fraction (offsite; STP)	0 %
Remarks	Maximum allowable site tonnage (MSafe) based on release following total wastewater treatment removal: 0 kg/d.

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Conditions and measures related to external recovery of waste

This substance is consumed during use and no waste of the substance is generated

Conditions and measures related to external treatment of waste for disposal

Combustion emissions limited by required exhaust emission controls. Combustion emissions considered in regional exposure assessment. External treatment and disposal of waste should comply with applicable local and/or national regulations

Section 2.2 - Control of consumer exposure

Control of consumer exposure	
Physical form of product	Liquid
Use frequency	Covers use up to 1,0 events per day
Operational conditions	General measures (skin irritants) Ensure there is no direct skin contact with product. Remove accidental skin contamination. General measures (flammability) For measures to control risks from physicochemical properties, refer to main body of the SDS, section 7 and/or 8. General measures (aspiration hazard) Do not ingest. If swallowed then seek immediate medical assistance
Product (sub) category(ies)	Fuels Liquid: automotive refuelling Gasoline (PC_13) Concawe_SCED_13_1_a
Covers concentrations up to	100 %
Remarks	Covers percentage benzene in the final product up to < 1 %.
Amounts used	37500 g/event
Exposure duration	0,05 hours
Use frequency	Covers use up to 1 events per day
Indoor/Outdoor use	Outdoor use
Operational conditions	Assumes that potential dermal contact is limited to palm of one hand
Product (sub) category(ies)	Fuels Liquid: Recreational vehicles (Quad bikes or similar) (PC_13) Concawe_SCED_13_7_a
Covers concentrations up to	100 %
Remarks	Covers percentage benzene in the final product up to < 1 %.
Amounts used	7500 g/event
Exposure duration	0,017 hours
Use frequency	Covers use up to 1 events per day
Indoor/Outdoor use	Outdoor use
Operational conditions	Assumes that potential dermal contact is limited to palm of one hand
Product (sub) category(ies)	Fuels Liquid: garden equipment - refuelling (PC_13) Concawe_SCED_13_4_a
Covers concentrations up to	100 %
Remarks	Covers percentage benzene in the final product up to < 0,1 %.

	Covers percentage n-hexane in the final product up to < 3 %. Covers percentage toluene in the final product up to < 3 %.
Amounts used	750 g/event
Exposure duration	0,033 hours
Use frequency	Covers use up to 1 events per day
Operational conditions	Assumes that potential dermal contact is limited to inside hands / one hand / palm of hands.

Section 3 - Exposure estimation

Calculation method

Environment

The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model

Health

The ECETOC TRA tool has been used to estimate consumer exposures unless otherwise indicated

Section 4 - Guidance to check compliance with the exposure scenario

Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures

Health

Predicted exposures are not expected to exceed the DN(M)EL when the risk management measures/operational conditions outlined in section 2 are implemented

Available hazard data does not enable the derivation of a DNEL for carcinogenic effects

Available hazard data do not enable the derivation of a DNEL for aspiration effects.

Available hazard data does not enable the derivation of a DNEL for dermal irritant effects.

Risk management measures are based on qualitative risk characterization.