	Safety Data Sheet	Date of issue: 01.06.2023
	Unleaded gasoline AKI93 (non-ethanol)	Version:1.0/EN

[In accordance with the criteria of Regulation No 1907/2006 (REACH) as amended]

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

1.1 Product identifier

Trade name: Unleaded gasoline AKI93 (non-ethanol)

UFI number: 8E50-U09X-000E-GKCV

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

Relevant identified uses: fuel for aircraft engines, the design of which allows for use of unleaded petrol.

Uses advised against: not determined.

1.3 Details of the supplier of the safety data sheet

Manufacturer: **WARTER FUELS Spółka Akcyjna**

Address: ul. Chemików 5, 09-411 Płock, Poland

Telephone number: +48 24/ 365 33 07/+48 24/ 365 22 83

with its registered office in Warsaw, address: ul. Koralkowa 60, 02-967 Warszawa

E-mail address for a competent person responsible for sds: biuro@thetaconsulting.pl

1.4 Emergency telephone number

112

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Flam. Liq. 2 H224, **Asp. Tox. 1** H304, **Skin Irrit. 2** H315, **Eye Irrit. 2** H319, **STOT SE 3** H335, **STOT SE 3** H336, **Muta 1B** H340, **Carc 1B** H350, **Repr. 2** H361, **STOT RE 2** H373, **Aquatic Chronic 2** H411

Extremely flammable liquid and vapour. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs (nervous system, hearing) through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.

2.2 Label elements

Hazard pictograms and signal words




Substances which influenced classification:

Naphtha (petroleum), full-range alkylate, naphtha (petroleum), isomerization; naphtha (petroleum), full-range reformed; toluene; reaction mass of ethylbenzene and m-xylene and p-xylene

Hazard statements

H224	Extremely flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.

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H350	May cause cancer.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs (nervous system, hearing) through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
<u>Precautionary statements</u>	
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe mist/vapours.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331	Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P501	Dispose of contents/container to properly labeled containers for the selective collection of waste.

2.3 Other hazards

Components of this mixture do not meet criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation.

The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1% by weight.

Section 3: Composition/information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures


Naphtha (petroleum), full-range alkylate

Range of percentages:	10-30 %
CAS number:	64741-64-6
EC number:	265-066-7
Index number:	649-274-00-9
Registration number:	01-2119485026-38-XXXX
Classification*:	Flam. Liq. 1 H224, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE. 3 H336, Aquatic Chronic 2 H411

taking into account the classification of P notes, **the product contains less than 0.1 w/w % of benzene.** The product does not contain n-hexane and toluene.

Naphtha (petroleum), isomerization; low boiling point modified naphtha

Range of percentages:	10-45%
CAS number:	64741-70-4
EC number:	265-073-5
Index number:	649-277-00-5
Registration number:	01-2119480399-24-XXXX

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Classification: Flam. Liq. 1 H224, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE 3 H336, Aquatic Chronic 2 H411

taking into account the classification of P notes, **the product contains less than 0.1 w/w % of benzene and < 1% n-hexane and toluene.**

Naphtha (petroleum), full-range reformed

Range of percentages: 0-45 %
 CAS number: 68919-37-9
 EC number: 272-895-8
 Index number: 649-307-00-7
 Registration number: 01-2119485808-20-0012
 Classification: Flam. Liq. 2 H225, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Muta 1B H340, Carc 1B H350, STOT SE 3 H336, Repr. 2 H361, Aquatic Chronic 2 H411

Isopentane

Range of percentages: 0-10 %
 CAS number: 78-78-4
 EC number: 201-142-8
 Index number: 601-085-00-2
 Registration number: 01-2119475602-38-XXXX
 Classification: Flam. Liq. 1 H224, Asp. Tox. 1 H304, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066*

Substance with a specific value at the European Union level of the permissible concentration in the work environment.

Toluene

Range of percentages: 0-30 %
 CAS number: 108-88-3
 EC number: 203-625-9
 Index number: 601-021-00-3
 Registration number: 01-2119471310-51-XXXX
 Classification: Flam. Liq. 2 H225, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE 3 H336, Repr. 2 H361d, STOT RE 2 H373 (central nervous system/ inhalation)

Substance with a specific value at the European Union level of the permissible concentration in the work environment.

Reaction mass of ethylbenzene and m-xylene and p-xylene


Range of percentages: 0-20 %
 CAS number: -
 EC number/List number: 905-562-9
 Index number: -
 Registration number: 01-2119555267-33-XXXX
 Classification: Flam. Liq. 3 H226, Asp. Tox. 1 H304, Acute Tox. 4 H312, Skin Irrit. 2 H315, Eye Irrit. 2 H319, Acute Tox. 4 H332, STOT SE 3 H335, STOT RE 2 H373 (hearing)

Specific concentration limits
 C ≥ 10 % STOT RE 2 H373

Xylene and ethylbenzene are substances with a specific value at the European Union level of the permissible concentration in the work environment.

Solvent naphtha (petroleum), light arom.

Range of percentages: 0-10 %
 CAS number: 64742-95-6

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EC number: 265-199-0
 Index number: 649-356-00-4
 Registration number: 01-211945581 -35-XXXX
 Classification: Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H335, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066*

taking into account the classification of P notes, **the product contains less than 0.1 w/w % of benzene.**

EC, CAS number resulting from the implementation of Regulation 1907/2006 (REACH)- CAS 128601-23-0, WE 918-668-

2,3-dimethylhexane (isooctane)

Range of percentages: 0-10 %
 CAS number: 540-84-1
 EC number: 208-759-1
 Index number: 601-009-00-8
 Registration number: 01-2119457965-22-0000
 Classification: Flam. Liq. 2 H225, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE 3 H336, Aquatic Acute 1 H400 (M=1), Aquatic Chronic 1 H410 (M=1)

*additional labelling element

Full text of each relevant H phrases is given in section 16 of sds.

Section 4: First aid measures

4.1 Description of first aid measures

Skin contact: remove contaminated clothing, immediately wash skin with plenty of water. If there was no irritation, it is advisable to use soap. If irritation occurs, consult a doctor.

Eye contact: consult a doctor if irritation occurs. Protect non-irritated eye, remove contact lenses. Rinse contaminated eyes with water for 10-15 minutes. Avoid strong stream of water - the risk of cornea damage.

Ingestion: do not induce vomiting. Call a doctor immediately and show container or label. In the case of spontaneous vomiting, keep the head low to prevent stomach contents from reaching the lungs. Never give anything by mouth to an unconscious person.

Inhalation: immediately consult a physician. Remove to fresh air, keep warm and at rest. Place the conscious person in a semi-sitting position; unconscious to arrange in the lateral position fixed; control and maintain airway patency. When breathing difficult, give oxygen, in case of lack of breath, apply artificial respiration with the help of the AMBU apparatus.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms may be delayed.

Eye contact: redness, tearing, mild irritation.

Skin contact: in the case of frequent or prolonged contact may cause redness, dryness, inflammation, irritation.


Ingestion: respiratory tract irritation, sore throat and respiratory tract, headache and dizziness. In serious cases, after 24 hours there is inflammation of the bronchi and lungs. In severe cases, pulmonary edema may occur, or loss of consciousness.

Ingestion: abdominal pain, nausea, vomiting, risk of pulmonary aspiration and chemical pneumonitis. In serious cases fainting may occur, hemolysis, disorders of internal organs.

Chronic effects of exposure: may cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs (nervous system, hearing) through prolonged or repeated exposure.

4.3 Indication of any immediate medical attention and special treatment needed

Physician makes a decision regarding further medical treatment after thoroughly examination of the injured. In the event of inhalation of decomposition products formed during a fire, the occurrence of symptoms may be delayed. An exposed person may require medical supervision for 48 hours.

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Section 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: fire extinguishers (CO₂), foam extinguishers, liquid extinguishers with an additional aqueous solution of the agent, powder extinguishers with ABC extinguishing powder, powder extinguishers with quenching powder BC, finally sprayed water jet.

Unsuitable extinguishing media: water jet – risk of the propagation of the flame.

5.2 Special hazards arising from the substance or mixture

During the combustion, toxic gases may be generated, such as carbon monoxide, nitrogen oxides, organic vapors, etc. Avoid inhalation of combustion products that may pose a health risk.

5.3 Advice for firefighters

The security measures typical in case of fire. Do not stay in the danger zone without adequate fire-resistant clothing and chemical-contained breathing apparatus with independent air circulation. Extremely flammable. In the case of a fire or heating pressure increase will occur in the tank, which creates a risk of explosion. It is necessary to isolate the threatened area and not take any action that would pose a risk to health or life. Product vapors are heavier than air and accumulate in the lower parts of the premises. There is a high likelihood of an explosive mixture with air - if such a danger occurs, order an immediate evacuation. The product is lighter than water and practically insoluble in water, it floats on its surface, creating a fire and explosion hazard. Containers exposed to fire should be cooled from a safe distance with water spray jet. Do not allow extinguishing water entering drains, surface water and groundwater.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For persons who do not belong to the personnel that liquidates the consequences of a breakdown: limit access of unauthorized persons to the area of failure until the completion of appropriate cleaning operations. In the case of large spills, isolate the area at risk. Avoid direct contact with the released product. Avoid breathing in vapors. Use personal protective equipment. Avoid contact with eyes and skin. Ensure adequate ventilation. Remove the ignition source, extinguish open fire, and announce a smoking ban. Danger of slipping on spilled product.

For those who eliminate the consequences of a breakdown: make sure that the removal of breakdowns and its consequences is carried out only by trained personnel. Use personal protective equipment.

6.2 Environmental precautions

In case of release of large amounts of the mixture, it is necessary to take appropriate steps to prevent it from spreading into the environment. Do not let the product to get through the surface or ground water and sewage system. Notify relevant emergency services. Contaminated soil should be exchange.

6.3 Methods and material for containment and cleaning up

Large leak: embank the places where the liquid accumulates, pump out the collected liquid.

Small leak: collect with non-flammable liquid absorbing materials (eg sand, soil, universal binders, silica, vermiculite, etc.) and place in labeled containers. Collect the collected material as waste. Clean and ventilate the contaminated area.

6.4 Reference to other sections

Appropriate conduct with waste product – see section 13.
Personal protective equipment – see section 8.

Section 7: Handling and storage**7.1 Precautions for safe handling**

Work in accordance with the principles of safety and hygiene. Avoid contact with eyes and skin. Before the break and after work wash your hands. Unused containers should be sealed locked. Ensure adequate ventilation. Do not inhale vapours. Do not allow the product to enter the mouth. Do not allow the concentration of fumes in the air and concentration within the limits of explosive or exceeding occupational exposure limit values. Eliminate sources of ignition - do not use open flames, no smoking, no sparking tools and clothing fabrics are susceptible to electrostatic; protect the tanks from heat, install electrical equipment in explosion-proof technology. Open the product containers carefully, dropping the overpressure. Empty packaging may contain product residues (liquid, vapor) that form an explosive mixture with air. Uncleaned packages / tanks must not be cut, drilled, grinded, welded, or performed in their vicinity. During loading operations, the necessary earthing must be made before static electricity. Women who are pregnant or planning to become pregnant should not handle this product.

7.2 Conditions for safe storage, including any incompatibilities

Store only in certified, properly labeled, closed steel tanks, in cool, well-ventilated warehouses. Store on a hard impermeable surface made of materials resistant to hydrocarbons. Tanks fill up to 90% of the volume. Store the ban on smoking, eating, using open fire and sparking tools. Store rooms should be cool and equipped with a ventilation system and electric in explosion-proof version. Take precautionary measures against electrostatic discharge; install explosion-proof electrical equipment, use bridging and grounding.

7.3 Specific end use(s)

Fuel for gasoline engines of vehicles, the design of which allows for use of unleaded petrol.

Section 8: Exposure controls/personal protection**8.1 Control parameters**

Specification	TWA 8 hour	STEL 15 min
toluene [CAS 108-88-3]	192 mg/m ³	384 mg/m ³ (skin)
ethylbenzene [CAS 100-41-4]	442 mg/m ³	884 mg/m ³ (skin)
isopentane [CAS: 78-78-4]	3 000 mg/m ³	-
xylylene, mixed isomers, pure [CAS 1330-20-7]	221 mg/m ³	442 mg/m ³ (skin)

Legal Basis: Commission Directive 2000/39/EC, 2006/15/EC, 2009/161/EC, 2017/164/EC, 2019/1831/UE.

Please check any national occupational exposure limit values in your country for substance contained in this product.

Recommended control procedures

Procedures concerning the control over the dangerous components concentrations in the air and control over the air quality in the workplace – if they are available and justified for the position – in accordance with the European Standards, with the conditions within the exposure place and a proper test methodology adapted to the working conditions.

DNEL and PNEC values

Toluene:

DNEL workers (dermal, long-term exposure - systemic): 384 mg/m³/dzień

DNEL workers (inhalation, long-term exposure - systemic): 192 mg/m³

DNEL workers (inhalation, long-term exposure - local): 192 mg/m³


DNEL workers (inhalation, acute exposure- systemic) 384 mg/m³

DNEL general population (dermal, long-term exposure - systemic): 226 mg/kg m.c.

DNEL general population (inhalation, long-term exposure - systemic): 56,5 mg/m³

DNEL general population (oral, long-term exposure - systemic): 8,13 mg/kg m.c.

DNEL general population (inhalation, acute exposure - local): 226 mg/m³.

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PNEC aqua freshwater 0,68 mg/l
 PNEC aqua marine water 0,68 mg/l
 PNEC soil 2,89 mg/kg
 PNEC sediment 16,39 mg/kg
 PNEC sewage treatment plant 13,61 mg/kg
Naphtha (petroleum), full-range reformed
 DNEL workers (inhalation, long-term exposure - local): 837.5 mg/m³
 DNEL workers (inhalation, acute exposure - systemic): 1,286.4 mg/m³
 DNEL workers (inhalation, acute exposure - local): 1,066.67 mg/m³
 DNEL general population (inhalation, long-term exposure - local): 178.57 mg/m³
 DNEL general population (inhalation, acute exposure - systemic): 1 152 mg/m³
 DNEL consumer (inhalation, acute exposure - local): 640 mg/m³
Naphtha (petroleum), isomerization:
 DN(M)EL (inhalation, acute exposure) : 1300 mg/m³/ 15 min
 DN(M)EL (inhalation, acute exposure- systemic) : 4320 mg/m³/ 1 h
 DN(M)EL (inhalation, long-term exposure): 840 mg/m³/ 8 h
 DN(M)EL (inhalation, long-term exposure): 10.000 mg/m³/6h/5 day
 PNEC aqua freshwater: *Tetrahymena pyriformis* LL50 (72 h) 15,41 mg/L

8.2 Exposure controls

Appropriate engineering controls

Observe the general safety and hygiene. During operation, do not eat, drink or smoke. Avoid contact with skin and eyes. Avoid breathing vapors or aerosols. Ensure good ventilation at work stations local and general ventilation - to ensure the maintenance of concentrations of hazardous components in the atmosphere below the exposure limit values. In case of worker being drench, showers and eye safety washers should be installed near the working place.

Individual protection measures, such as personal protective equipment

The necessity to use and selection of appropriate personal protective equipment should take into account the type of risk posed by the product, conditions at the workplace and the manner of handling the product. The personal protective equipment used must meet the requirements of Regulation (EU) 2016/425 and the relevant standards. The employer is obliged to provide protection measures appropriate to the activities performed and meeting all quality requirements, including their maintenance and cleansing. Any contaminated or damaged PPE must be replaced immediately.

Hand and body protection

Use gloves resistant to chemicals according to EN ISO 374. Recommended glove material: nitrile rubber, PVA. In case of short-term exposure wear the protective gloves with protection level 2 or higher (breakthrough time > 30 min). In case of long-term exposure wear the protective gloves with protection level 6 (breakthrough time > 480 min). Use appropriate protective clothing and shoes - chemically resistant in an antistatic version in accordance with the EN ISO 13688 standard.


When using protective gloves in contact with chemical products, it should be remembered that the given levels of effectiveness and the corresponding breakthrough times do not mean the actual time of protection at a given workplace, because this protection is affected by many factors, such as temperature, impact of other substances, etc. It is recommended to replace the gloves immediately if there are any signs of wear, damage or changes in appearance (color, elasticity, shape). Follow the manufacturer's instructions not only for the use of gloves, but also for cleaning, maintenance and storage. It is also important to remove the gloves correctly to avoid contamination of the hands while doing so.

Eye/face protection

Wear protective goggles according to EN 166 .

Respiratory protection

In case of vapors and aerosols formation, use the absorbing or absorbing and filtering equipment of an adequate protective class (class 1/ protection from gasses or vapors with a volume concentration lower than 0,1%; class 2/ protection from gasses or vapors with a volume concentration lower than 0,5%; class 3/ protection from gasses or vapors with a volume concentration up to 1%). If the concentration of oxygen is ≤19% and/or the maximum concentration of toxic substance in the air is ≥1,0% of volume the isolating equipment should be used.

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Environmental exposure controls

Prevent direct runoff into drains / surface waters. Do not contaminate surface waters and drainage ditches, chemicals or used packaging. Any spill or uncontrolled spills into surface water should be reported to the appropriate authorities in accordance with national and local regulations.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

physical state:	liquid
colour:	colorless
odour:	characteristic for organic solvents
melting point/freezing point:	not determined
boiling point or initial boiling point and boiling range:	20-210 °C
flammability:	extremely flammable liquid and vapour
lower and upper explosive limits:	not determined
flash point:	<0 °C
auto-ignition temperature:	not determined
decomposition temperature:	not determined
pH:	not determined
kinematic viscosity:	not determined
solubility:	not dissolve in water, dissolves in organic solvents
partition coefficient: n-octanol/water (log value):	not determined
vapour pressure:	not determined
density and/or relative density (15°C):	720-775 kg/m ³
relative vapour density:	> 1 (air=1)
particle characteristics:	not applicable

9.2 Other information

No additional data.

Section 10: Stability and reactivity

10.1 Reactivity

Under normal conditions, it does not react dangerously with other substances. The product may soften some plastics. Polymerization is not dangerous. See also subsection: 10.3-10.5.

10.2 Chemical stability

The product is stable under normal conditions.

10.3 Possibility of hazardous reactions

The product may form explosive mixtures with air.

10.4 Conditions to avoid


Avoid sources of heat, elevated temperature, open fire, direct sunlight, electrostatic charges.

10.5 Incompatible materials

Strong oxidizers.

10.6 Hazardous decomposition products

Unknown.

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Section 11: Toxicological information

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

Acute toxicity of components

Naphtha (petroleum):

LD50 oral, rat	> 5000 mg/kg
LC50 inhalation, rat	> 5610 mg/l (4 h)
LD50 dermal,rabbit	> 5000 mg/kg
NOAEL:	10080 mg/m ³ air
NOAEC:	9840 mg/m ³ air

Toluene:

LD50 oral, rat	5580 mg/kg
LD50 dermal, rabbit	> 5000 mg/kg
LC50 inhalation, rat	> 20 mg/l (4 h)
NOAEC	1131 mg/m ³

Information concerning acute and/or delayed effects of exposure was specified on the base of classification of the product and/or toxicology testing and the manufacturer's knowledge and experience.

Toxicity of product

Acute toxicity

ATE _{mix} (skin):	> 2 000 mg/kg
ATE _{mix} (inhalation, vapour):	> 20 mg/l

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

Skin corrosion/ irritation

Causes skin irritation.

Serious eye damage/ irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

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

Germ cell mutagenicity

May cause genetic defects.

Carcinogenicity

May cause cancer.

Reproductive toxicity

Suspected of damaging fertility or the unborn child.

STOT- single exposure

May cause respiratory irritation. May cause drowsiness or dizziness.

STOT- repeated exposure

May cause damage to organs (nervous system, hearing) through prolonged or repeated exposure.

Aspiration hazard

May be fatal if swallowed and enters airways.

Information on likely routes of exposure

Health effects of acute exposure

Mucous membrane irritation, tearing hyperaemia, irritation of the respiratory tract, headache, dizziness, nausea, vomiting, with higher concentrations of vapor coordination abnormal, confusion, unconsciousness. Acute, severe and even fatal aviation gasoline poisoning occur during cleaning of tanks, storage tanks, during pouring. Sometimes dangerous aviation gasoline soaked clothing, which easily penetrates into the body through the skin. Aviation gasoline damage internal organs, including bone and liver. Sensitize the myocardium. Leads to respiratory paralysis.

Health effects of chronic exposure

The symptoms of chronic exposure: upper respiratory inflammation and skin (dryness, redness, cracking). Decreased appetite are observed, general weakness and conjunctivitis, symptoms of central nervous system.

The effects of mutual interaction

They are not known.

11.2. Information on other hazardsEndocrine disrupting properties

The components of the mixture are not assessed as substances with endocrine disrupting properties.

Other information

No data.

Section 12: Ecological information**12.1 Toxicity****Toxicity of components**Naphtha (petroleum)

Acute toxicity

fish LL ₅₀ (96 h)	8,2 mg/l (<i>Pimephales promelas</i>)
invertebrates EL ₅₀ (48h)	12 mg/l (<i>Daphnia magna</i>)w środowisku wodnym.
algae EL ₅₀ (96h)	45 mg/l (<i>Selenastrum capricornutum</i>)

Chronic toxicity

skorupiaki NOELR (21 dni)	16 mg/l (<i>Daphnia magna</i>)
glony NOELR (96 h)	18 mg/l (<i>Selenastrum capricornutum</i>)

Toluene

Acute toxicity

fish LC ₅₀ (96 h)	24 mg/l (<i>Lepomis macrochirus</i>)
LC ₅₀ (96 h)	13 mg/l (<i>Carassius auratus</i>)
LC ₅₀ (96 h)	6,3 mg/l (<i>Oncorhynchus kisutch</i>)
LC ₅₀ (96 h)	59,3 mg/l (<i>Peocillia reticulata</i>)
invertebrates EC ₅₀ (48 h)	10 mg/l (<i>Daphnia magna</i>)
algae EC ₅₀ (72h)	32 mg/l (<i>Selenastrum capricornutum</i>)

Chronic toxicity

fish LOEC (32 days):	1,6 mg/l (<i>Pimephales promelas</i>)
EC ₁₀	3,5 mg/l (<i>Oncorhynchus mykiss</i>)
marine fish NOEC (28 dni)	3,1 mg/l (<i>Morone saxatilis</i>)
LOEC (28 dni)	5,3 mg/l (<i>Morone saxatilis</i>)
invertebrates i NOEC (7 dni)	38 uM (<i>Ceriodaphnia dubia</i>)
LOEC (7 dni)	114 uM (<i>Ceriodaphnia dubia</i>)

Toxicity of product


Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Ingredients are poorly degradable.

12.3 Bioaccumulative potential

Some components of the product have the potential to bioaccumulate.

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12.4 Mobility in soil

Insoluble in water, it floats on the surface. Product is poorly mobile in soil and water environment. Mobility of components of the mixture in soil depends on the hydrophilic and hydrophobic properties and biotic and abiotic conditions of soil, including its structure, climatic conditions, seasons and soil organisms (mostly: bacteria, fungus, algae, invertebrates).

12.5 Results of PBT and vPvB assessment

Components of this mixture do not meet criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation.

12.6 Endocrine disrupting properties

The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1% by weight.

12.7 Other adverse effects

Acceptable ambient air pollution: 0,5µg/m³ per Pb. The mixture is not classified as hazardous to the ozone layer. Consider other harmful effects of individual components of the mixture on the environment (e.g., endocrine disrupting potential, global warming potential).

Section 13: Disposal considerations

13.1 Waste treatment methods

Disposal methods for the product: dispose in accordance with applicable regulations. Do not empty into drains. Residues stored in sealed, steel containers. Wastes classify as hazardous waste.

Disposal methods for used packing: recycling or neutralizing should be done according to obligatory regulations for waste. Only completely emptied packagings can be recycled. Do not mix with other waste. The classification for this waste meets the requirements for the hazardous waste.

Legal basis: Directive 2008/98/EC as amended, 94/62/EC as amended.

Section 14: Transport information

14.1 UN number or ID number

UN 1203

14.2 UN proper shipping name

ADR/RID

MOTOR SPIRIT

IMDG

MOTOR SPIRIT

ICAO/IATA

MOTOR SPIRIT

14.3 Transport hazard class(es)


3

14.4 Packing group

II

14.5 Environmental hazards

According to ADR, RID, IMDG product is a threat to the environment.

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14.6 Special precautions for user

Wear suitable protective clothing, gloves and eye / face protection in accordance with section 8.
Avoid ignition sources.

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

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC as amended.

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 (Text with EEA relevance) as amended.

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives as amended.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste as amended.

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC.

Commission Directive 2009/161/EU of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.

Commission Directive 2017/164/EU of 31 January 2017 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU.

Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.

Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC.


15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for mixtures.

Section 16: Other information

Full text of indicated R and H phrases mentioned in section 3

H224	Extremely flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

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H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects
H350	May cause cancer.
H361	Suspected of damaging fertility or the unborn child.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Clarification of aberrations and acronyms

PBT	Persistent, Bioaccumulative and Toxic substance
vPvB	very Persistent, very Bioaccumulative substance
TWA	Time Weighted Average
STEL	Short-term exposure limit
Acute Tox. 4	Acute toxicity cat. 4
Asp. Tox. 1	Aspiration hazard cat. 1
Aquatic Chronic 1, 2	Hazardous to the aquatic environment cat. 1, 2
Asp. Tox. 1	Aspiration hazard category 1
Carc. 1B	Carcinogenicity cat. 1B
Muta. 1B	Mutagenity cat. 1B
Eye Irrit. 2	Eye irritation cat. 2
Flam. Liq. 1, 2, 3	Flammable liquid cat. 1, 2, 3
Repr. 2	Reproductive toxicity cat. 2
Skin Irrit. 2	Skin irritation cat. 2
STOT RE 2	Specific target organ toxicity — repeated exposure cat. 2
STOT SE 3	Specific target organ toxicity — single exposure cat. 3
Aquatic Acute 1	Hazardous to the aquatic environment, cat. 1

Trainings

Before commencing working with the product, the user should learn the Health & Safety regulations, regarding handling chemicals, and in particular, undergo a proper workplace training. Persons related to the transportation of the dangerous goods in compliance with the ADR Agreement should be properly trained within the scope of performed tasks (general training, on-the-job training and training related to the safety issues).

Key literature references and sources of data

The data sheet has been developed on the basis of the material safety data sheets provided by the manufacturer, literature data, internet databases and the possessed knowledge and experience, taking into account the current legal regulations.

Classification and procedures used to classify the mixture

The classification was made on the basis of physicochemical tests and data on the content of hazardous ingredients using the calculation method based on the guidelines of Regulation 1272/2008/EC (CLP). The acute toxicity of the mixture (ATEmix) was calculated from the appropriate conversion factor in Table 3.1.2. Annex I to the CLP Regulation.

The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are to be treated as aid to safety in transport, storage and usage of the product. That does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field.