



Safety Data Sheet

[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

Aviation Gasoline Avgas 100LL

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

Relevant identified uses: fuel for aircraft.

Uses advised against: not determined.

1.3 Details of the supplier of the safety data sheet

Manufacturer: **Puma Aviation Europe OÜ**

Address: Rae põik 6, Harju country 76806, Estonia

Telephone number: +372 679 0999

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

1.4 Emergency telephone number

112

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Flam. Liq. 2 H225, **Asp. Tox. 1** H304, **Skin Irrit. 2** H315, **STOT SE 3** H336, **Muta 1B** H340, **Carc 1B** H350, **Repr. 2** H361fd, **STOT RE 2** H373, **Aquatic Chronic 2** H411

Highly flammable liquid and vapour. May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness. May cause genetic defects. May cause cancer. Suspected of damaging fertility. Suspected of damaging the unborn child. May cause damage to organs 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

Contains: naphtha (petroleum), light alkylate; toluene; naphtha (petroleum), isomerization; 1,2-dibromoethane.

Hazard statements

H225 Highly 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.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P201 Obtain special instructions before use.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.



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- P260 Do not breathe vapours.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/eye protection/face protection.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P308+P313 IF exposed or concerned: Get medical advice/attention.

Additional information

Restricted to professional users.

2.3 Other hazards

Substances contain in the product do not meet criteria for PBT or vPvB in accordance with Annex XIII of Regulation REACH.

Section 3: Composition/information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

CAS number: 64741-64-6 EC number: 265-066-7 Index number: 649-274-00-9 REACH number: 01-2119485026-38-XXXX	<u>naphtha (petroleum), light alkylate</u> Flam. Liq. 2 H225, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE 3 H336, Muta 1B H340, Carc. 1B H350, Repr. 2 H361fd, Aquatic Chronic 2 H411	55-90 %
CAS number: 108-88-3 EC number: 203-625-9 Index number: 601-021-00-3 REACH number: 01-2119471310-51-XXXX	<u>toluene</u> ¹ Flam. Liq. 2 H225, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE 3 H336, Repr. 2 H361d, STOT RE 2 H373	3-25 %
CAS number: 64741-70-4 EC number: 265-073-5 Index number: 649-277-00-5 REACH number: 01-2119480399-24-XXXX	<u>naphtha (petroleum), isomerization</u> Flam. Liq. 1 H224, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE 3 H336, Muta 1B H340, Carc. 1B H350, Repr. 2 H361f, Aquatic Chronic 2 H411	≤ 20 %
CAS number: 78-78-4 EC number: 201-142-8 Index number: 601-085-00-2 REACH number: 01-2119475602-38-XXXX	<u>isopentane</u> ¹ Flam. Liq. 1 H224, Asp. Tox. 1 H304, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066 *	≤ 8 %
CAS number: 78-00-2 EC number: 201-075-4 Index number: 082-002-00-1 REACH number: 01-2119622080-57-XXXX	<u>tetraethyllead</u> Acute Tox. 2 H300, Acute Tox. 1 H310, Acute Tox. 1 H330, Repr. 1A H360Df, STOT RE 2 H373, Aquatic Acute 1 H400, Aquatic Chronic 1 H410 (M=1)	≤ 0,15 %
CAS number: 106-93-4 EC number: 203-444-5 Index number: 602-010-00-6 REACH number: 01-2119539453-38-XXXX	<u>1,2-dibromoethane</u> Acute Tox. 3 H301, Acute Tox. 3 H311, Skin Irrit. 2 H315, Eye Irrit. 2 H319, Acute Tox. 3 H331, STOT SE 3 H335, Carc. 1B H350, Aquatic Chronic 2 H411	≤ 0,1 %

¹ Substance with occupational exposure limits defined on the European Union level

* Additional phrase indicating hazard type.

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



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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. Contact with eyes, rinse thoroughly with water, for at least 15 minutes with open eyelids. Avoid strong stream of water - the risk of cornea damage.

Ingestion: do not induce vomiting. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, keep the victim's head low to avoid aspiration of the product into the lungs. Call a doctor immediately and show container or label.

Inhalation: immediately remove to fresh air, keep warm and 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. Immediately consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

Eye contact: redness, tearing, burning, blurred vision, pain.

Skin contact: redness, burning sensation, degreasing, drying, cracking of the skin, inflammation, irritation.

Ingestion: respiratory tract irritation, sore throat and respiratory tract, headache and dizziness, tiredness, drowsiness.

Ingestion: abdominal pain, nausea, vomiting, diarrhea, irritation of mucous membranes of the digestive system, risk of pulmonary aspiration and chemical pneumonitis.

Other effects of exposure: may cause genetic defects and cancer. Suspected of damaging fertility. Suspected of damaging the unborn child. May cause damage to organs 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. Treat symptomatically.

Section 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: CO₂, dry chemicals, extinguishing foam, alcohol resistant foam, water spray.

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

5.2 Special hazards arising from the substance or mixture

During the fire, the product may produce harmful gases containing, e.g carbon oxides, nitrogen oxides, and other unidentified thermal decomposition products. Do not inhale combustion products, they can be dangerous for human health.

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. Highly flammable liquid and vapour. 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. Product's vapours may travel considerable distance along the floor/ ground to sources of ignition and may flash back. There is a high likelihood of an explosive mixture with air - if such a danger occurs, order an immediate evacuation. 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. Collect used extinguishing media.



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Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Limit the access for the outsiders into the breakdown area, until the suitable cleaning operations are completed. Ensure that only the trained personnel removes the effects of the accident. In the case of large spills, isolate the area at risk. Use personal protective equipment. Avoid contact with eyes and skin. Ensure adequate ventilation. Avoid breathing of vapors. Do not step the spilled product - risk of slipping. Remove the ignition source, extinguish open fire, and announce a smoking ban. Danger of slipping on spilled product. WARNING: Area endangered by fire and explosion. Prevent vapor accumulation in low or restricted spaces to avoid explosive concentrations.

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. Secure drains; do not let product get into them. Contaminated soil should be exchange.

6.3 Methods and material for containment and cleaning up

Stop the leak if you can do it without danger. The spillage collect with non-flammable liquid-binding material (e.g. sand, earth, silica, universal binders) and place in labeled containers. In case of large spills, isolate the place where the liquid accumulates and pump out the liquid. Collected material should be treated 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. Before the break and after work wash your hands. Avoid contact with eyes and skin. Wear personal protective equipment. Ensure adequate ventilation. Do not inhale the vapour. Do not allow the product to enter the mouth. 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. During loading operations, the necessary earthing must be made before static electricity. Unused containers keep tightly closed. Pregnant women and those planning pregnancy should not work with this product.

7.2 Conditions for safe storage, including any incompatibilities

Store only in original, tightly closed containers, closed steel tanks, in dry, cool, well-ventilated warehouses. Keep away from food or feed for animals and incompatible materials – (see subsection 10.5). Do not smoke, use open fire and sparking tools in the warehouse. Protect against direct sunlight and excessive heating.

7.3 Specific end use(s)

No information about other uses than those mentioned in subsection 1.2.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Specification	TWA 8 hour	STEL 15 min	Remarks
toluene [CAS 108-88-3]	192 mg/m ³	384 mg/m ³	skin
isopentane [CAS 78-78-4]	3000 mg/m ³	1000 mg/m ³	-

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

The table above shows the maximum workplace concentration values on the Community level.

Please check any national occupational exposure limit values in your country.



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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.

8.2 Exposure controls

Handle in accordance with good occupational hygiene and safety practices. During operation, do not eat, drink or smoke. Before the break and after work wash your hands. 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. Avoid contact with skin and eyes. Immediately off contaminated clothing and wash before re-use. If during work processes there is a risk of clothing fire on the employee - no more than 20 m in a horizontal line from the stations where these processes are performed, emergency showers (safety showers) for washing the whole body and separate showers (showers) for eye washing should be installed.

Hand and body protection

Use gloves that protect against chemical agents and are resistant to the product. Material for gloves select individually at the workplace. In case of a short exposure, use protective gloves with 2nd or higher level of effectiveness (breakthrough time > 30 min). In case of a long exposure, use protective gloves with 6th level of effectiveness (breakthrough time > 480 min).

When using protective gloves during work with chemical products, it should be noted that the efficacy levels and corresponding breakthrough times do not indicate actual times of protection at a particular workplace, because the protection can be affected by many factors, e.g. temperature, other substances etc. If there are any signs of degradation, damage or change in appearance (colour, flexibility, shape), it is recommended to replace the gloves with a new pair. Please follow the manufacturer's instructions, not only in terms of gloves' usage, but also in terms of their cleaning, maintenance and storage. It is also important to know how to take off the gloves in order to avoid hands contamination.

Body protection

Wear protective work clothing adequate to the performed task and suitable for the potential hazard.

In case of prolonged contact with product use protective clothing made of a coated or impregnated fabric types 3, 4 or 6 protecting against liquid chemical substances (selection should be made taking into account the method of exposure to a chemical agent).

Eye/face protection

Wear tightly fitting protective glasses if there is a risk of eye contamination.

Respiratory protection

If the occupational exposure limit values are exceeded or in emergency situations, use absorbing or absorbing and filtering equipment with a suitable protection class (class 1/protection against vapours with a concentration in the air volume not exceeding 0.1 %, class 2 / protection against vapours with a concentration in the air not exceeding 0.5 %, class 3 / protect against vapours at concentrations in the air volume to 1 %). In cases where the oxygen concentration is ≤ 19 % and / or maximum concentration of toxic substances in the air is ≥ 1.0 % by volume, isolating equipment should be used.

Personal protective equipment must meet requirements of regulation (EU) 2016/425. Employer is obliged to ensure equipment adequate to activities carried out, with quality demands, cleaning and maintenance.

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:	blue
odour:	characteristic
odour threshold:	not determined



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pH:	not determined
melting point/freezing point:	< - 65°C
initial boiling point and boiling range:	> 35 - 170°C
flash point:	< 21°C
evaporation rate:	not determined
flammability (solid, gas):	not applicable
upper/lower flammability or explosive limits:	not applicable
vapour pressure (37,8°C):	38-49 kPa
vapour density:	not determined
density:	not determined
solubility(ies):	not determined
partition coefficient: n-octanol/water:	not determined
auto-ignition temperature:	not determined
decomposition temperature:	not determined
explosive properties:	not display
oxidising properties:	not display
viscosity:	not determined

9.2 Other information

No data.

Section 10: Stability and reactivity

10.1 Reactivity

The product is reactive. Vapours of the product may form explosive mixtures with air. It does not undergo a dangerous polymerization. See also subsections 10.3-10.5.

10.2 Chemical stability

The product is stable under normal conditions.

10.3 Possibility of hazardous reactions

The product reacts violently with strong oxidants.

10.4 Conditions to avoid

Avoid sources of fire and heat, high temperature, direct sunlight.

10.5 Incompatible materials

Strong oxidizers.

10.6 Hazardous decomposition products

No data.

Section 11: Toxicological information

11.1 Information on toxicological effects

Toxicity of components

naphtha (petroleum), light alkylate [CAS 64741-64-6]

LD ₅₀ (oral, rat)	> 5000 mg/kg
LD ₅₀ (dermal, rabbit)	> 2000 mg/kg
LC ₅₀ (inhalation, rat)	> 5,61 mg/l/4h

toluene [CAS 108-88-3]

LD ₅₀ (oral, rat)	> 5000 mg/kg
LD ₅₀ (dermal, rabbit)	> 2000 mg/kg
LC ₅₀ (inhalation, rat)	> 20 mg/l/4h



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naphtha (petroleum), isomerization [CAS 64741-70-4]

LD ₅₀ (oral, rat)	> 5000 mg/kg
LD ₅₀ (dermal, rabbit)	> 2000 mg/kg
LC ₅₀ (inhalation, rat)	> 5610 mg/l/4h

tetraethyllead [CAS 78-00-2]

LD ₅₀ (oral, rat)	12,3 mg/kg
LD ₅₀ (dermal, rabbit)	990 mg/kg
LC ₅₀ (inhalation, rat)	850 mg/l/1h

1,2-dibromoethane [CAS 106-93-4]

LD ₅₀ (oral, rat)	108 mg/kg
LD ₅₀ (dermal, rabbit)	300 mg/kg
LD ₅₀ (dermal, rat)	300 mg/kg

Toxicity of product

Acute toxicity

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

The acute toxicity estimate ATE_{mix} for the classification of a substance in a mixture was determined using the appropriate conversion value from Table 3.1.2 in Annex I to CLP as amended.

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

Skin corrosion/ irritation

Causes skin irritation.

Serious eye damage/ 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.

Germ cell mutagenicity

May cause genetic defects.

Carcinogenicity

May cause cancer.

Reproductive toxicity

Suspected of damaging fertility. Suspected of damaging the unborn child.

STOT- single exposure

May cause drowsiness or dizziness.

STOT- repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Due to the low viscosity, swallowing or vomiting may directly penetrate the lungs and cause serious lung damage (aspiration pneumonia).

Health effects of acute exposure

Irritation of the mucous membranes of the eyes, 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.



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Section 12: Ecological information

12.1 Toxicity

Toxicity of components

naphtha (petroleum), light alkylate [CAS 64741-64-6]

Toxicity for fish LL ₅₀	8,2 mg/l/96h/ <i>Pimephales promelas</i>
Toxicity to crustaceans EC ₅₀	2 mg/l/48h/ <i>Mysidopsis bahia</i>
Toxicity to crustaceans EL ₅₀	4,5 mg/l/48h/ <i>Daphnia magna</i> (OECD 202)
Toxicity for algae EC ₅₀	30000 mg/l/72h/ <i>Pseudokirchnerella subcapitata</i>
Toxicity for algae EL ₅₀	3,1 mg/l/72h/ <i>Pseudokirchnerella subcapitata</i>

toluene [CAS 108-88-3]

Toxicity for fish LC ₅₀	5,5 mg/l/96h
Toxicity for fish NOEC	1,4 mg/l
Toxicity for algae EC ₅₀	12,5 mg/l/72h/ <i>Pseudokirchnerella subcapitata</i>
Toxicity for algae EC ₅₀	> 433 mg/l/96h/ <i>Pseudokirchnerella subcapitata</i>

naphtha (petroleum), isomerization [CAS 64741-70-4]

Toxicity for fish LC ₅₀	8,2 mg/l/96h
Toxicity for fish LC ₅₀	10 mg/l
Toxicity to crustaceans EC ₅₀	4,5 mg/l/48h
Toxicity for algae ErC ₅₀	3,1 mg/l/72h
Toxicity for algae EC ₅₀	30000 mg/l/72h/ <i>Pseudokirchnerella subcapitata</i>

isopentane [CAS 78-78-4]

Toxicity to crustaceans EC ₅₀	2,3 mg/l/48h/ <i>Daphnia magna</i>
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tetraethyllead [CAS 78-00-2]

Toxicity for fish LC ₅₀	84 mg/l/96h/ <i>Lepomis macrochirus</i>
Toxicity for fish LC ₅₀	19,3 mg/l/96h/ <i>Pimephales promelas</i>
Toxicity to crustaceans EC ₅₀	0,085 mg/l/48h/ <i>Artemia salina</i>

1,2-dibromoethane [CAS 106-93-4]

Toxicity for fish LC ₅₀	32,1 mg/l/96h/ <i>Oryzias latipes</i>
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Toxicity of product

Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

No data.

12.3 Bioaccumulative potential

No data.

12.4 Mobility in soil

Insoluble in water, it floats on the surface. Product is mobile in soil. 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

Substances contain in the product do not meet criteria for PBT or vPvB in accordance with Annex XIII of Regulation REACH.

12.6 Other adverse effects

Product does not have any influence on global warming and destruction of the ozone layer.



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Section 13: Disposal considerations

13.1 Waste treatment methods

Disposal methods for the product: dispose of in accordance with applicable regulation. Residues store in original containers. Do not mix with other wastes. Dispose of the waste product in authorized waste disposal facility. Waste code should be given in place of its formation. The classification for this waste meets the requirements for the hazardous waste.

Disposal methods for used packing: reuse /recycle / liquidate empty containers in accordance with the local legislation. Only containers completely empty can be recycled. Only completely emptied packagings can be recycled. Do not mix with other wastes. Waste code should be given in place of its formation.

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

Section 14: Transport information

14.1 UN numer (ONZ Number)

UN 1203



14.2 UN proper shipping name

MOTOR SPIRIT

14.3 Transport hazard class(es)

3



14.4 Packing group

II

14.5 Environmental hazards

According to transport regulations, product is hazardous for the environment.

14.6 Special precautions for user

When handling, use personal protective clothing according to section 8 of the SDS. Keep away from ignition sources.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

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 (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Text with EEA relevance).

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.



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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 as amended.

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 2019/1831/EU 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 in accordance with REACH Regulation.

Section 16: Other information

Full text of indicated H phrases mentioned in section 3

H224	Extremely flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H304	May be fatal if swallowed and enters airways.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
H360Df	May damage fertility. May damage the unborn child.
H361d	Suspected of damaging the unborn child.
H361f	Suspected of damaging fertility.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H360fd	May damage the unborn child. Suspected of damaging fertility.
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. 1,2,3	Acute toxicity cat. 1,2,3
Aquatic Acute 1	Hazardous to the aquatic environment cat. 1
Aquatic Chronic 1,2	Hazardous to the aquatic environment cat. 1,2
Asp. Tox. 1	Aspiration hazard, cat. 1
Carc. 1B	Carcinogenicity cat. 1B
Eye Irrit. 2	Eye irritation cat. 2
Muta. 1B	Germ cell mutagenicity
Flam. Liq. 1,2	Flammable liquid cat. 1,2
Repr. 1A, 2	Reproductive toxicity cat. 1A, 2



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Skin Irrit. 2 Skin irritation cat. 2
STOT RE 2 Specific target organ toxicity — repeated exposure cat. 2
STOT RE 3 Specific target organ toxicity — repeated exposure cat. 3

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 data sources

This SDS was prepared on the basis of SDS delivered by the producer, literature data, online databases (eg. ECHA, TOXNET, COSING) as well as our knowledge and experience, taking into account current legislation.

Procedures used for classification of the mixture

Classification was based on physico-chemical data and data on hazardous substances calculation method under the guidance of Regulation 1272/2008/EC (CLP) as amended.

Other data

Version: 2.0/PL

Safety Data Sheet made by: „**THETA**” Doradztwo Techniczne

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.