

## SAFETY DATA SHEET

### SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1. Product identifier:**  
**A.Z. Meistererteile Motor Starter Spray**
- 1.2. Relevant identified uses of the mixture and uses advised against:**  
Motor starter spray for maintenance, consumer and professional use.  
  
Uses advised against: Use other than identified.
- 1.3. Details of the supplier of the safety data sheet:**  
  
Information about the distributor:  
**Unix Autó Kft.**  
1139 Budapest, Frangepán utca 55-57.  
Tel.: 00 36 1 270 8700  
E-mail: [info@unixauto.hu](mailto:info@unixauto.hu)
- 1.3.1. Responsible person:** Unix Autó Kft.  
**E-mail:** [info@unixauto.hu](mailto:info@unixauto.hu)
- 1.4. Emergency telephone number:** Emergency telephone (07-15:20 h): +36 34 526 210 (CET) on workdays  
Health Toxicological Information Service (ETTSZ)  
1097 Budapest, Albert Flórián út 2-6.  
Tel.: +36 80 201 199, +36 1 476 6464 (0-24 h)

### SECTION 2: HAZARDS IDENTIFICATION

- 2.1. Classification of the mixture:**  
  
Classification according to Regulation (EC) No 1272/2008 (CLP):  
Aerosols, Hazard Category 1 – H222; H229  
Acute toxicity (oral), Hazard Category 4 – H302  
Specific target organ toxicity – Single exposure, Hazard Category 3, Narcosis – H336  
Specific target organ toxicity – Repeated exposure, Hazard Category 2 – H373  
Hazardous to the aquatic environment – Chronic Hazard, Category 3 – H412
- Hazard statements:**  
**H222** – Extremely flammable aerosol.  
**H229** – Pressurised container: May burst if heated.  
**H302** – Harmful if swallowed.  
**H336** – May cause drowsiness or dizziness.  
**H373** – May cause damage to organs through prolonged or repeated exposure (central nervous system).  
**H412** – Harmful to aquatic life with long lasting effects.

## 2.2. Label elements:

Components that define the hazards: Diethyl ether; Hydrocarbons, C<sub>9</sub>-C<sub>12</sub>, n-alkanes, isoalkanes, cyclics, aromatic compounds (2-25%)



### Hazard statements:

**H222** – Extremely flammable aerosol.  
**H229** – Pressurised container: May burst if heated.  
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**H373** – May cause damage to organs through prolonged or repeated exposure (central nervous system).  
**H412** – Harmful to aquatic life with long lasting effects.

**EUH 019** – May form explosive peroxides.  
**EUH 066** – Repeated exposure may cause skin dryness or cracking.

### Precautionary statements:

**P102** – Keep out of reach of children.  
**P210** – Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
**P211** – Do not spray on an open flame or other ignition source.  
**P251** – Do not pierce or burn, even after use.  
**P410 + P412** – Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.  
**P261** – Avoid breathing spray.  
**P273** – Avoid release to the environment.  
**P304 + P340** – IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
**P305 + P351 + P338** – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**P501** – Dispose of contents/container in accordance with local regulations.

## 2.3. Other hazards:

Vapours may spread along the floor, explosive gas / air mixtures may be formed.  
 The product does not contain any PBT or vPvB substances in accordance with Annex XIII of Regulation (EC) No 1907/2006.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances:

Not applicable.

### 3.2. Mixtures:

Mixture with propellant containing substances not classified as hazardous and the following hazardous ingredients:

Description	CAS number	EC number / ECHA list number	REACH registration number	Conc. (%)	Classification according to Regulation (EC) No 1272/2008 (CLP)		
					Pictogram, signal word code(s)	Hazard class and category code(s)	Hazard statement code(s)
<b>Diethyl ether**</b> Index number: 603-022-00-4	60-29-7	200-467-2	01-2119535785-29	>40	GHS02 GHS07 Danger	Flam. Liq. 1 Acute Tox. 4 STOT SE 3	H224 H302 H336 EUH019 EUH066
<b>"Farmerfény"</b> (Mixture of aliphatic	mixture	mixture	-	< 5	GHS02 GHS08 GHS07	Flam. Liq. 3 Asp. Tox. 1 Eye Irrit. 2	H226 H304 H319

hydrocarbons and alcohols)					GHS09 Danger	STOT SE 3 STOT RE 1 Aquatic Chronic 2	H336 H372 (central nervous system) H411
<b>Propane</b> Index number: 601-003-00-5	74-98-6	200-827-9	01-2119486944-21	propellant	GHS02 GHS04 Danger	Flam. Gas 1 Press. Gas	H220
<b>Butane***</b> Index number: 601-004-00-0	106-97-8	203-448-7	01-2119474691-32	propellant	GHS02 GHS04 Danger	Flam. Gas 1 Press. Gas	H220
<b>Isobutane***</b> Index number: 601-004-00-0	75-28-5	200-857-2	01-2119485395-27	propellant	GHS02 GHS04 Danger	Flam. Gas 1 Press. Gas	H220

**"Farmerfény" (Mixture of aliphatic hydrocarbons and alcohols):**

Contains:

Description	CAS number	EC number / ECHA list number	REACH registration number	Conc. (%)	Classification according to Regulation (EC) No 1272/2008 (CLP)		
					Pictogram, signal word code(s)	Hazard class and category code(s)	Hazard statement code(s)
<b>Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, &lt;2% aromatic*</b>	-	918-481-9	01-2119457273-39	43-48	GHS02 GHS08 Danger	Flam. Liq. 3 Asp. Tox. 1	H226 H304
<b>Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatic compounds (2-25%) (benzene &lt;0.01%)*</b>	-	919-446-0	01-2119458049-33	43-48	GHS02 GHS08 GHS07 GHS09 Danger	Flam. Liq. 3 STOT SE 3 STOT RE 1 Asp. Tox. 1 Aquatic Chronic 2	H226 H304 H336 H372 (central nervous system) H411
<b>Propan-2-ol</b> Index number: 603-117-00-0	67-63-0	200-661-7	01-2119457558-25	9-11	GHS02 GHS07 Danger	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	H225 H319 H336

\*: Classification specified by the manufacturer; the substance is not listed in Annex VI of the Regulation (EC) No 1272/2008.

\*\*: Substance having occupational exposure limit value.

\*\*\*: 1,3-butadiene (EINECS: 203-450-8) content < 0.1 %.

For the full text of hazard statements, see Section 16.

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures:

**General information:** Take the victim into fresh air. In cases of doubt, when symptoms, complaints persist or feeling unwell, seek medical attention. Do not give anything by mouth to an unconscious person.

#### **INGESTION:**

Measures:

- Ingestion is unlikely (aerosol).
- In case of accidental ingestion or swallowing of the spray, do not induce vomiting.
- Seek medical attention immediately. Show the safety data sheet / label.

#### **INHALATION:**

Measures:

- When inhaling the spray, take the victim into fresh air and keep at rest in a position comfortable for breathing.
- In case of cough, difficulty of breathing or nausea, call a doctor immediately.

**SKIN CONTACT:**

Measures:

- Remove the contaminated clothes.
- Wash the skin with plenty of water and soap.
- In case of complaints or irritation, obtain medical attention.

**EYE CONTACT:**

Measures:

- In case of contact with eyes flush with water holding eyelids apart and moving the eyeballs (for at least 10-15 minutes).
- Remove the contact lenses, if present and easy to do. Continue rinsing.
- In case of complaints or irritation, obtain medical attention.

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

High concentrations of propellant may be stifling and may cause oxygen deprivation.

Inhalation: May cause drowsiness or dizziness.

Skin contact: Repeated exposure may cause skin dryness or cracking.

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

Treat symptomatically.

Constant monitoring for the first 48 hours is important.

If possible, show the safety data sheet / label to the doctor.

## SECTION 5: FIREFIGHTING MEASURES

**5.1. Extinguishing media:**

**5.1.1. Suitable extinguishing media:**

Water spray, extinguishing powder, carbon dioxide, foam.

**5.1.2. Unsuitable extinguishing media:**

Do not use full water jet. Water can only be used to cool containers.

**5.2. Special hazards arising from the substance or mixture:**

Extremely flammable aerosol.

The area must be evacuated.

There is a risk of explosion due to heating of the closed, pressurized container.

Gases can form an explosive mixture with air.

In case of fire, smoke and other combustion products ((CO, CO<sub>2</sub>, (explosive) peroxides) may be formed; the inhalation of such combustion products can have serious adverse effects on health.

Due to the aerosol formulation, large spills of the mixture are unlikely.

**5.3. Advice for firefighters:**

Wear full protective clothing and self-contained breathing apparatus.

Avoid inhalation of combustion products.

The leak must be eliminated.

The extinguishing agent should not be allowed into drains, water courses, or the environment.

Cool the fire affected containers with water spray.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**6.1. Personal precautions, protective equipment and emergency procedures:**

**6.1.1. For non-emergency personnel:**

Allow only well-trained experts wearing suitable protective clothing to abide in the field of accident.

**6.1.2. For emergency responders:**

Unauthorized persons must be kept away.

The leak must be eliminated, if it can be done without any risk.

Remove all sources of ignition, open flame.

Protect against static discharge, only non-sparking devices may be used.

Observe hygiene and safety regulations.

Avoid contact with skin and eyes.

Do not inhale the aerosol.

Emergency responders are required to use personal protection.

Vapours are heavier than air and may spread along floors. Explosive gas / air mixtures may be formed.

Ensure adequate ventilation.

**6.2. Environmental precautions:**

Extremely flammable aerosol, may cause an explosion if it enters the sewer system.

All ignition sources, open flames must be closed / removed if it can be done without any risk.

Due to the aerosol formulation, large spills of the mixture are unlikely.

Dispose of the spillage and the resulting waste according to the applicable environmental regulations. Do not allow the product and the resulting waste to enter sewers/soil/surface or ground water. Notify the respective authorities in accordance with local law in the case of environmental pollution immediately.

**6.3. Methods and material for containment and cleaning up:**

Eliminate the leak, if it can be done without any risk.

Do not breathe spray.

The endangered area must be closed and unauthorized persons must not be allowed to enter.

Collect the spilled product with non-combustible absorbent, then place into a suitable, closed waste container till proper removal/disposal.

Rags soaked in the product, paper, or materials used to pick up spilled product may present a fire hazard.

**6.4. Reference to other sections:**

For further and detailed information see Sections 7, 8, 13 and 15.

## SECTION 7: HANDLING AND STORAGE

**7.1. Precautions for safe handling:**

Observe conventional hygiene precautions.

Avoid accumulation of spray in air.

The required safety and hygiene measures must be observed.

Avoid contact with skin and eyes. Do not inhale the aerosol.

Do not eat, drink, or smoke when using this product.

Contaminated clothing should be removed and cleaned before reuse.

Wash hands with soap and running water before breaks and at the end of the work.

**Technical measures:**

Can be used outdoors or in a well-ventilated room.

Wear appropriate personal protective equipment.

Protect against electrostatic charge, use non-sparking tools.

Electrical equipment must comply with regulations.

**Precautions against fire and explosion:**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Do not spray on a naked flame or any ignition sources.

May form explosive peroxides.

Vapours may spread along floors and explosive gas / air mixtures may be formed.

Pressurized container: do not pierce or burn, even after use.

**7.2. Conditions for safe storage, including any incompatibilities:**

**Technical measures and storage condition:**

Store in a well-ventilated, cool, dry place.

Heating can cause the containers to rupture, there is a risk of explosion.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

Smoking is not allowed in the warehouse.

Protect against electrostatic charge.

Electrical equipment must comply with regulations.

It is forbidden to expose to sunlight, radiant heat or throw it into fire, even when empty.

Do not expose to heat above 50 °C.

The requirements for pressurized containers must be observed.

Do not store together with strong oxidizing agents, nitrates, halogens.

Keep away from food, drink and animal feed.

Keep out of reach of children.

**Storage temperature:** under 35 °C.

**Incompatible materials:** See Section 10.5

**Packaging material:** No special prescriptions.

**7.3. Specific end use(s):**

No specific instructions available, see section 1.2.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters:

**Occupational exposure limit values** (Commission Directive (EC) No 2000/39 of 8 June 2000):

**Diethyl ether** (CAS: 60-29-7): Limit values: Eight hour: 308 mg/m<sup>3</sup>, 100 ppm; Short-term: 616 mg/m<sup>3</sup>, 200 ppm

DNEL values		Oral exposure		Dermal exposure		Inhalative exposure	
		Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)
Consumer	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	no data	no data	no data	no data	no data
Worker	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	no data	no data	no data	no data	no data

PNEC values		
Compartment	Value	Note(s)
Freshwater	no data	no notes
Marine water	no data	no notes
Freshwater sediment	no data	no notes
Marine water sediment	no data	no notes
Sewage Treatment Plant (STP)	no data	no notes
Intermittent release	no data	no notes
Secondary poisoning	no data	no notes
Soil	no data	no notes

### 8.2. Exposure controls:

In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.

#### 8.2.1. Appropriate engineering controls:

In pursuance of work is proper foresight needed to avoid spilling onto clothes and floors and to avoid contact with eyes and skin. Ensure adequate ventilation.

#### 8.2.2. Individual protection measures, such as personal protective equipment:

Precautions for handling chemicals, safety rules for pressurized containers and hygiene regulations must be observed.

Do not eat or drink when using this product. Do not smoke.

Avoid contact with skin and eyes. Do not inhale aerosol.

Contaminated clothing should be removed and cleaned before reuse.

Wash hands with soap and running water before breaks and at the end of the work.

See also section 6-7.

Personal protection should be selected based on the specific exposure, according to the risk assessment data.

- Eye/face protection:** Use appropriate, tightly fitting protective glasses (EN 166), if there is a risk of spray contact.
- Skin protection:**
  - Hand protection:** Use appropriate protective gloves (EN 374).  
 The glove material should be impermeable and resistant to the product.  
 Select glove material based on the penetration time, rates of diffusion and degradation.  
 The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. Contaminated protective gloves should be removed and cleaned before re-use.
  - Other:** For regular use, impervious protective clothing should be worn if there is a risk of skin contact.
- Respiratory protection:** In case of insufficient ventilation (exposure above the exposure limit), use appropriate respiratory protective device.
- Thermal hazards:** No thermal hazards known.

#### 8.2.3. Environmental exposure controls:

Do not empty into drains, the aquatic environment or the environment.

The requirements detailed in Section 8 assume skilled work under normal conditions and usage of the product for appropriate aims. If conditions differ from normal or work is carried out under extreme conditions, an expert's advice is necessary before deciding upon further protective measures.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties:

Parameter	Value / Test method / Remarks
1. <b>Appearance:</b>	aerosol, transparent
2. <b>Odour:</b>	characteristic of ether
3. Odour threshold:	no data*
4. pH:	no data*
5. Melting point/freezing point:	no data*
6. Initial boiling point and boiling range:	no data*
7. Flash point:	no data*
8. Evaporation rate:	no data*
9. Flammability (solid, gas):	extremely flammable aerosol
10. Upper/lower flammability or explosive limits:	no data*
11. Vapour pressure:	no data*
12. Vapour density:	no data*
13. Relative density:	no data*
14. Solubility(ies):	partly miscible with water
15. Partition coefficient: n-octanol/water:	no data*
16. Auto-ignition temperature:	no data*
17. Decomposition temperature:	no data*
18. Viscosity:	no data*
19. Explosive properties:	the mixture is not explosive, but explosive gas / air mixture may be formed
20. Oxidizing properties:	no data*

### 9.2. Other information:

No data available.

\*: The manufacturer did not carry out any tests on this parameter for the product or the results of the tests are not available at the time of publication of the data sheet.

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity:

No reactivity known under recommended storage and handling conditions.

### 10.2. Chemical stability:

Stable under recommended storage and handling conditions.

### 10.3. Possibility of hazardous reactions:

May form explosive peroxides.

### 10.4. Conditions to avoid:

Heat, hot surface, open flame, direct sunlight, all ignition sources, sparks.  
Protect against electrostatic charge.

### 10.5. Incompatible materials:

Strong acids, alkalis, oxidizing agents.

### 10.6. Hazardous decomposition products:

No decomposition products known under normal use.

In case of fire, incomplete combustion may produce hazardous combustion products (see section 5).

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects:

**Acute toxicity:** Harmful if swallowed.

**Skin corrosion/irritation:** Based on available data, the classification criteria are not met.

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

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

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

**STOT-single exposure:** May cause drowsiness or dizziness.

**STOT-repeated exposure:** May cause damage to organs through prolonged or repeated exposure (central nervous system).

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

### 11.1.1. Summaries of the information derived from the test conducted:

No data available.

### 11.1.2. Relevant toxicological properties:

Acute toxicity:

**Diethyl ether** (CAS-szám: 60-29-7):

LD<sub>50</sub> (oral, rat): 1211 mg/kg

Information about the mixture:

Skin corrosion/irritation:

Not classified as dangerous.

Potential Health Effects: Repeated exposure may cause skin dryness or cracking.

Germ cell mutagenicity, Carcinogenicity, Reproductive toxicity:

The mixture is not classified for CMR, the components of the product do not meet the criteria for classification in CMR categories 1 and 2.

### 11.1.3. Information on likely routes of exposure:

Ingestion, inhalation, skin contact, eye contact.

### 11.1.4. Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

### 11.1.5. Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Harmful if swallowed.

May cause drowsiness or dizziness.

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

Repeated exposure may cause skin dryness or cracking.

### 11.1.6. Interactive effects:

No data available.

### 11.1.7. Absence of specific data:

No information.

### 11.1.8. Other information:

No data available.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity:

Harmful to aquatic life with long lasting effects.

### 12.2. Persistence and degradability:

No data available.

### 12.3. Bioaccumulation potential:

No data available.

### 12.4. Mobility in soil:

No data available.

### 12.5. Results of PBT and vPvB assessment:

The product does not contain any PBT or vPvB substances in accordance with Annex XIII of Regulation (EC) No 1907/2006.

### 12.6. Other adverse effects:

Do not allow to enter drains, watercourses, soil or groundwater.



## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. **Waste treatment methods:**

Disposal according to the local regulations.

#### 13.1.1. **Information regarding the disposal of the product:**

Dispose of in accordance with applicable regulations for hazardous waste.

Do not dispose of together with household waste.

##### **List of Waste Code:**

**16 05 04\*** gases in pressure containers (including halons) containing hazardous substances

\*: Hazardous waste.

The waste code depends on the use of the product. Use the European Waste Catalogue and determine the appropriate code for the waste. The exact waste code must be checked with the transport company. Contact your local competent authority for more information. Local regulations must be observed.

#### 13.1.2. **Information regarding the disposal of the packaging:**

Dispose of in accordance with applicable regulations for hazardous waste.

Do not empty into drains, water courses or the aquatic environment.

Avoid release of aerosol into the environment.

#### 13.1.3. **Physical/chemical properties that may affect waste treatment options shall be specified:**

Pressurized container: do not pierce or burn, even after use.

Do not open, knock, puncture, expose to temperatures above 50 °C, to direct sunlight or radiant heat, or dispose of in fire, even when empty.

#### 13.1.4. **Sewage disposal:**

No data available.

#### 13.1.5. **Special precautions for any recommended waste treatment:**

No data available.

## SECTION 14: TRANSPORT INFORMATION

ADR/RID; ADN; IMDG; IATA:

### 14.1. **UN Number:**

UN 1950

### 14.2. **UN proper shipping name:**

ADR/RID, ADN:

AEROSOLS, flammable

IMDG, IATA:

AEROSOLS, flammable

### 14.3. **Transport hazard class(es):**

Class: 2

Classification code: 5F

Label: 2.1

Transportation category: 2

Label marking: Flame

Restriction LQ: 2

### 14.4. **Packing group:**

No packing group.

### 14.5. **Environmental hazards:**

Environmentally hazardous: No.

Marine pollutant: No.

### 14.6. **Special precautions for user:**

See section 6-8.

### 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, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive (EC) No 1999/45 and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive (EEC) No 76/769 and Commission Directives (EEC) No 91/155, (EEC) No 93/67, (EC) No 93/105 and (EC) No 2000/21

**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 (EEC) No 67/548 and (EC) No 1999/45, and amending Regulation (EC) No 1907/2006

**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)

**COMMISSION DIRECTIVE (EU) No 2013/10/EU** of 19 March 2013 amending Council Directive (EEC) No 75/324 on the approximation of the laws of the Member States relating to aerosol dispensers in order to adapt its labelling provisions to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures

**COMMISSION DIRECTIVE (EU) No 2013/10** of 19 March 2013 amending Council Directive (EEC) No 75/324 on the approximation of the laws of the Member States relating to aerosol dispensers

### 15.2. Chemical safety assessment: Has not been carried out.

## SECTION 16: OTHER INFORMATION

**Information regarding the revision of the safety data sheet:** No information.

### **Literature references / data sources:**

Safety data sheet issued by the manufacturer (05.11.2017, Version: 8, Hungarian).

### **Methods used for the classification according to Regulation (EC) No 1272/2008:**

Classification	Method
Aerosols, Hazard Category 1 – H222; H229	Based on test methods (test data)
Acute toxicity (oral), Hazard Category 4 – H302	Based on calculation method
Specific target organ toxicity – Single exposure, Hazard Category 3, Narcosis – H336	Based on calculation method
Specific target organ toxicity – Repeated exposure, Hazard Category 2 – H373	Based on calculation method
Hazardous to the aquatic environment – Chronic Hazard, Category 3 – H412	Based on calculation method

### **Relevant hazard statements (code and full text) of Sections 2 and 3:**

**H220** – Extremely flammable gas.  
**H222** – Extremely flammable aerosol.  
**H224** – Extremely flammable liquid and vapour.  
**H225** – Highly flammable liquid and vapour.  
**H226** – Flammable liquid and vapour.  
**H229** – Pressurised container: May burst if heated.  
**H302** – Harmful if swallowed.  
**H304** – May be fatal if swallowed and enters airways.  
**H319** – Causes serious eye irritation.  
**H336** – May cause drowsiness or dizziness.

**H372** – Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

**H373** – May cause damage to organs through prolonged or repeated exposure (central nervous system).

**H411** – Toxic to aquatic life with long lasting effects.

**H412** – Harmful to aquatic life with long lasting effects.

**EUH 019** – May form explosive peroxides.

**EUH 066** – Repeated exposure may cause skin dryness or cracking.

**Training advice:** No data available.

**Full text of the abbreviations in the safety data sheet:**

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road.

ATE: Acute Toxicity Estimate.

AOX: Adsorbable organic halides.

BCF: Bioconcentration factor.

BOD: Biological Oxygen Demand.

CAS number: Chemical Abstract Service number.

CLP: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

CMR effects: Carcinogenic, mutagenic, reprotoxic effects.

COD: Chemical Oxygen Demand.

CSA: Chemical Safety Assessment.

CSR: Chemical Safety Report.

DNEL: Derived-No-Effect-Level.

ECHA: European Chemical Agency.

EC: European Community.

EC number: EINECS and ELINCS numbers (see also EINECS and ELINCS).

EEC: European Economic Community.

EEA: European Economic Area (EU + Iceland, Liechtenstein and Norway).

EINECS: European Inventory of Existing Commercial Chemical Substances.

ELINCS: European List of Notified Chemical Substances.

EN: European Norm.

EU: European Union.

EWG: European Waste Catalogue (replaced by LoW – see below).

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.

IATA: International Air Transport Association.

ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.

IMDG: International Maritime Dangerous Goods.

IMSBC: International Maritime Solid Bulk Cargoes.

IUCLID: International Uniform Chemical Information Database.

IUPAC: International Union of Pure and Applied Chemistry.

Kow: n-Octanol - Water Partition Coefficient.

LC50: Lethal concentration resulting in 50 % mortality.

LD50: Lethal dose resulting in 50 % mortality (median lethal dose).

LoW: List of Waste.

LOEC: Lowest Observed Effect Concentration.

LOEL: Lowest Observed Effect Level.

NOEC: No Observed Effect Concentration.

NOEL: No Observed Effect Level.

NOAEC: No Observed Adverse Effect Concentration.

NOAEL: No Observed Adverse Effect Level.

OECD: Organization for Economic Cooperation and Development.

OSHA: Occupational Safety and Health Administration.

PBT: Persistent, Bioaccumulative and Toxic.

PNEC: Predicted No Effect Concentration.

QSAR: Quantitative Structure Activity Relationship.

REACH: Regulation 1907/2006/EC concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.

SCBA: Self Contained Breathing Apparatus.

SDS: Safety Data Sheet.

STOT: Specific Target Organ Toxicity.

SVHC: Substances of Very High Concern.

UN: United Nations.

UVCB: Chemical Substances of Unknown or Variable Composition, Complex Reaction Products and Biological Materials.

VOC: Volatile Organic Compound.

vPvB: very Persistent and very Bioaccumulative.

This safety data sheet had been prepared on the basis of information provided by the manufacturer/supplier and conform to the relevant regulations.

The information, data and recommendations contained herein are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date issued; however, no representation is made as to the comprehensiveness of the information.

The SDS shall be used only as a guide for handling the product; in the course of handling and using the product other considerations may arise or be required.

Users are cautioned to determine the appropriateness and applicability of the above information to their particular circumstances and purposes and assume all risk associated with the use of this product.

It is the responsibility of the user to fully comply with local, national and international regulations concerning the use of this product.

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Safety data sheet was prepared by:  
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