

SAFETY DATA SHEET
IN ACCORDANCE WITH REGULATION (EC) 1907/2006 (REACH)
Airconditioner cleaner spray

Preparing date: 19 September 2023

Version: 1.

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

- 1.1. Product identifier:** Airconditioner cleaner spray
- UFI: AWMM-1E0A-JSKJ-NGGH
- 1.2. Relevant identified uses of the substance or mixture and uses advised against:**
Identified uses: Maintenance. Consumer, industrial and professional use.
Uses advised against: Use other than identified.
- 1.3. Details of the supplier of the safety data sheet**
Distributor: SZAKAL MET-AL Zrt.
2040 Kamaraerdei u 9/c
HUNGARY
www.szakalmetal.eu
- Email address for competent person responsible for the safety data sheet:** kozpont@szakalmetal.hu
- 1.4. Emergency telephone number**
Health Toxicology Information Service
Egészségügyi Toxikológiai Tájékoztató Szolgálat
(ETTSZ) 06-80-201-199 (free charge, 24 hours a day)
06-1-476 6464

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Aerosols Category 1	H222	Extremely flammable aerosol.
	H229	Pressurised container: May burst if heated.

2.2 Label elements:

Composition: > 50% Ethanol, ~50 % Propellant mixture (Propane/Butane/Isobutane),
< 2% Propan-2-ol



Signal word: Danger



Expletive Pharma Kft.
www.kemiaikockazat.hu

Hazard statements:

- H222 Extremely flammable aerosol.
 H229 Pressurised container: May burst if heated.

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.
 P261 Avoid breathing dust/fume/ gas/mist/vapours/spray.
 P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Ingredients according to Regulation (EC) No 648/2004 on detergents: perfume.

Note: When packaging/labelling aerosol products, the provisions of the Decree No. 34/2014 (X. 30.) NGM regulation (on the requirements for the marketing of aerosol products and aerosol packaging) must also be followed.

2.3 Other hazards:

- Product vapours are heavier than air and can spread at ground level. The vapours can form an explosive gas/air mixture.
 Take precautions against electrostatic charging.
 The substances do not meet the criteria for classification as PBT or vPvB.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

Chemical name	CAS Number	EK Number	Index Number/ Registration Number	Concentration m/m%	Classification
Ethanol	64-17-5	200-578-6	01- 2119457610-43/ 603-002-00-5	>50 %	Flam. Liq. 2 H225
Propan-2-ol	67-63-0	200-661-7	01- 2119457558-25/ 603-117-00-0	<2 %	Flam. Liq. 2 H225 Eye Irrit. 2 H319 STOT SE 3 H336
Propellant mixture				~ 50 %	



Propane	74-98-6	200-827-9	601-003-00-5/01-2119486944-21	-	Flam.Gas 1, H220 Press Gas
Butane	106-97-8	203-448-7	601-004-00-0/01-2119474691-32	-	Flam.Gas 1, H220 Press Gas
Isobutane	75-28-5	200-857-2	601-004-0-0/01-2119485395-27	-	Flam.Gas 1, H220 Press Gas

The full text of the H statements can be found under section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General measures: Fresh air is needed. In case of symptoms, complaints or doubt consult a doctor immediately. In case of sickness, seek medical attention.

Never administer anything by mouth to an unconscious person.

In case of inhalation: When the spray is inhaled, the casualty should be moved to fresh air and be placed in a resting position so that they can breathe easily.

In case of coughing, difficulty in breathing or feeling unwell, a doctor should be called immediately.

In case of skin contact: take off contaminated clothing and wash contaminated skin with plenty of soap and water. In case of complaint seek medical advice.

In case of eye contact: flush eyes with plenty of running water for at least 10-15 minutes. Keep the eyelid edges apart and move the eyeball at the same time. Remove contact lenses if you have them and if this can be done easily. Continue rinsing.

Seek medical advice in case of complaints or irritation.

In case of ingestion: ingestion unlikely (aerosol). Accidental ingestion of the spray into the mouth, in case of accidental ingestion, do not vomit, call a doctor immediately. If swallowed or ingested, show the safety data sheet/label to the doctor.

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

Inhalation of large amounts of vapour may cause respiratory irritation.

Inhalation of large amounts of spray aerosol may cause headaches, vertigo, drowsiness or dizziness.

At higher concentrations, propellant gas can cause suffocation and oxygen starvation.

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

Monitoring and symptomatic treatment is required. The Safety Data Sheet/Label should be shown to the doctor.



SECTION 5: Firefighting measures**5.1 Extinguishing media**

Suitable extinguishing media: extinguishing powder, CO₂, foam, water spray.

Extinguishing media, which shall not be used for safety reasons: Do not use strong water jet. The water can only be used for cooling the bottles.

5.2. Special hazards arising from the substance or mixture:

Extremely flammable aerosol. The container is overpressurized: due to heat may rupture. Heating of the closed pressurised container may cause explosion risk. In case of fire, dangerous decomposition products may be produced: CO, CO₂, other hydrocarbons.

The resulting gases can form an explosive mixture with air.

The area must be evacuated. Due to the aerosol formulation, the mixture is highly explosive of the mixture is unlikely.

5.3. Advice for firefighters: In the event of fire, appropriate fire-resistant protective clothing and the use of isolation respiratory protection device (independent of the ambient air) is required.

The resulting combustion products must not be inhaled. Leakage must be eliminated. Prevent the extinguishing agent from entering drains, living water or the environment.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Only designated, trained personnel involved in the rescue operation in the area at risk, emergency responders and remove unauthorised persons.

Remove all sources of ignition, open flames.

Stop leaks if this can be done without danger.

Keep open flames, ignition sources and sparks out of the air space. Only non-sparking devices may be used.

Observe hygiene and safety regulations. Avoid contact with eyes and skin.

Persons involved in the discharge must use personal protection. Ensure ventilation of the hazardous area.

6.2 Environmental precautions

Do not discharge into the environment, drains, soil, groundwater or living water (extremely flammable aerosol, may cause explosion if released into sewerage system).

All sources of ignition, open flames must be blocked/removed if without risk can be done without danger. In the event of entry into the environment, water, public sewerage systems, the territorially competent authorities and operators must be notified immediately. Release in large quantities is unlikely (aerosol can).

6.3 Methods and material for containment and cleaning up

Stop the leak if it can be done without risk. Do not breathe the spray. The danger area must be sealed off and unauthorised persons must not enter the area entry. The spillage must not be covered with combustible absorbent material (e.g. dry soil, sand) must be collected and placed in a sealed container until removal. Rags soaked with product, paper or materials used to pick up spillage may present a fire hazard.



6.4. Reference to other sections

Safe handling (as described in section 7).

See section 8 for information on personal protective equipment.

For information on disposal, see section 13.

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

For use outdoors or in a well-ventilated room. Avoid spray accumulation in the air. Keep away from sources of ignition and do not smoke.

The prescribed safety and hygiene measures must be observed. Avoid contact with the product contact with eyes and skin, inhalation of aerosol.

Do not eat or drink during use.

Personal protective equipment must be used. Contaminated clothing must be removed and re-used cleaned before reuse. Use running water during breaks and after work, washing hands with soap and water. Rags and papers soaked with the product or used to pick up spilled product may present a fire hazard.

Fire and explosion protection: extremely flammable aerosol.

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

Smoking is prohibited. Do not spray on open flames or other sources of ignition.

The container is overpressurised: heat may cause it to crack. Electrostatic charging must be protected against. Use non-sparking tools.

The product may be used in places where there is no open flame, fire or other ignition source. Vapours can spread over the ground surface and explosive gas/air mixture may be produced.

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

7.2 Conditions for safe storage, including any incompatibilities

Store in a well-ventilated, cool, dry place at a temperature below 35 °C. Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition.

Do not expose to temperatures exceeding 50 °C. When heated, the bottles may rupture, there may be a risk of explosion.

No smoking in the storage area. Protection against electrostatic charging is required. The electrical equipment must comply with the regulations. Exposure to solar radiation, radiant exposure to radiant heat or fire, even when empty. Pressurized containers must be complied with.

Do not store with: strong oxidizing oxidants.

Keep separate from food, beverages and animal feed. Keep out of reach of children.

7.3 Specific end use(s): Maintenance. Consumer, industrial and professional use.**SECTION 8: Exposure controls/personal protection****8.1 Control parameters**

Limit values permitted in workplace air (Hungary):

According to Decree No. 5/2020 (II. 6.) ITM on the protection of the health and safety of workers exposed to chemical agents, the values of the average concentration and the maximum permissible concentration in the workplace air of dangerous substances and their characteristic properties are:



Substance name	CAS-number	ÁK-value (mg/m ³)	CK-value (mg/m ³)	Characteristic property	Reference	ÁK correction group
ETIL-ALKOHOL (Ethanol)	64-17-5	1900	3800	-	-	N
IZOPROPIL-ALKOHOL (Propan-2-ol)	67-63-0	500	1000	b,i	-	R
n-BUTÁN (Butane)	106-97-8	2350	9400	-	-	N

N	Irritants, simple asphyxiants, low health hazards substances. Correction is NOT necessary.
R	Substances that may cause adverse health effects from SHORT exposure. Corrected ÁK = ÁK x 8/a hours per day
T	Substances that may cause adverse health effects CONSIDERING exposure after exposure. Corrected ÁK = ÁK x 40/a hours per week
b	It is also absorbed through the skin.
i	an irritant that excites the skin, mucous membranes, eyes or all three
k(...)	carcinogenic (in brackets Regulation (EC) No 1272/2008 of the European Parliament and of the Council, CLP Regulation classification for short)
EU1	Value communicated in Directive 2000/39/EC
EU6	Value communicated in EU Directive 2019/130
ÁK-value	average allowable concentration
CK-value	maximum allowable concentration
CAS-number	Chemical Abstracts Service used to identify chemicals registration number

Recommended limits for biological exposure and action indicators for occupational chemical exposure in urine

Permissible limit

Chemical substance	Biological exposure (effect) indicator	Sampling time	mg/g creatinine	micromoles/mmol creatinine (rounded values)	mg/l	µmol/l
Izopropil-alkohol (Propan-2-ol)	acetone	m.v. (=end of shift)			25	430

DNELs, PNECs: No data available.

8.2 Exposure controls

According to ITM Decree No.5/2020 (6.II.): the employer is obliged to reduce the level of exposure to the lowest level of exposure to a dangerous substance what is not regulated by a limit value to the lowest level that can be expected according to the state of scientific and technical knowledge, at which level the dangerous substance has no harmful effects on health.

The usual precautions for handling chemicals, for containers under pressure safety rules and hygiene requirements must be observed.



Do not eat or drink while working. Smoking is prohibited. Avoid contact with the preparation skin and eyes. Aerosol must not be inhaled.

Contaminated protective clothing must be removed and cleaned before reuse.

During breaks in work and after work and before meals, wash with running water with soap.

Technical measures: for use with adequate ventilation.

Individual precautions, e.g. personal protective equipment:

(a) eye/face protection: Use tight-fitting safety goggles that comply with the regulations (EN 166). Wear face protection if necessary.

(b) hand protection: impermeable, oil-resistant protective gloves (EN 374).

The material of the glove must be impermeable and resistant to the preparation resistant to the product. The selection of the most suitable protective gloves for the specific circumstances, taking into account the penetration time, penetration rate and degradation. Wear time and breakthrough time are determined by the glove manufacturer of the gloves and the prescribed time should be observed.

Contaminated gloves must be removed and cleaned before reapplication.

(c) Respiratory protection: If the exposure limit values are exceeded, respiratory protection should be used in accordance with the regulations.

(d) skin protection: during regular use, in case of skin contact hazard, the substance must not be transferred protective clothing is recommended.

Selection of individual protection based on the specific exposure, data from the risk assessment.

Environmental exposure control:

Do not discharge to sewers, living water, environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- | | | |
|----|---|--|
| a) | Physical State: | aerosol |
| b) | Colour: | colourless |
| c) | Odour: | characteristic (specific to the fragrance) |
| d) | Melting point/freezing point | No data available. |
| e) | Boiling point or initial boiling point and boiling range: | No data available. |
| f) | Flammability: | extremely flammable aerosol |
| g) | Lower and upper explosion limit | No data available. |
| h) | Flash point: | No data available. |
| i) | Auto-ignition temperature: | No data available. |
| j) | Decomposition temperature: | No data available. |
| k) | pH: | Not relevant. |
| l) | Kinematic viscosity: | No data available. |
| m) | Solubility: | soluble with water |
| n) | Partition coefficient n-octanol/water (log value): | No data available. |



- | | | |
|----|----------------------------------|--------------------|
| o) | Vapour pressure: | No data available. |
| p) | Density and/or relative density: | No data available. |
| q) | Particle characteristics: | No data available. |

9.2 Other information:

Explosion hazard: the mixture is not explosive, but explosive gas/air mixtures may occur.

SECTION 10: Stability and reactivity

10.1 Reactivity: unknown, under normal conditions of storage and use

10.2 Chemical stability: unknown, under normal conditions of storage and use

10.3 Possibility of hazardous reactions: stable under normal conditions

10.4 Conditions to avoid: heat, hot surfaces, open flame, direct sunlight, all ignition sources, sparks. Electrostatic charging must be protected against.

10.5 Incompatible materials: strong oxidants

10.6 Hazardous decomposition products: not known degradation products under normal use formation of. In the event of fire, dangerous combustion products may be formed in the event of incomplete combustion.

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****(a) acute toxicity:**

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

(b) skin corrosion/irritation:

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

(c) serious eye damage/irritation:

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

(d) respiratory or skin sensitisation:

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

(e) germ cell mutagenicity:

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

(f) carcinogenicity:

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

(g) reproductive toxicity:

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

(h) STOT-single exposure:

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

(i) STOT-repeated exposure:

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

(j) aspiration hazard:

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

11.2. Information on other hazards: Not known.**SECTION 12: Ecological information**

12.1 Toxicity:

No data available for the mixture.

Mixture not classified for environmental hazard according to Regulation (EC) No 1272/2008.

12.2 Persistence and degradability:

No data available for the mixture.

12.3 Bioaccumulative potential:

No data available for the mixture.

12.4 Mobility in soil:

No data available for the mixture.

12.5 Results of PBT and vPvB assessment

The substances do not meet the criteria for classification as PBT or vPvB.

12.6 Endocrine disrupting properties:

No data available.

12.7 Other adverse effects:

No data available. No discharge into water supply, sewer, soil, groundwater or living water.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Hazardous waste. Not to be treated with communal waste.

Disposal of the material/mixture: Dispose of in accordance with local regulations

May be disposed of in accordance with local regulations. [225/2015 (VIII. 7.) Korm.]

Disposal of contaminated packaging:

Disposal subject to local regulations.

[Government Decree 442/2012 (XII. 29.) on packaging and packaging waste on waste management activities related to packaging and packaging waste]

Under pressure: do not puncture or burn, even after use.

Proposed waste code: 16 05 04* (hazardous waste stored in pressure containers) substances (including halons)).

Packaging: hazardous waste, do not throw packaging material down the drain, watercourses, living water. Avoid release of aerosol into the environment.

Pressurised container: do not puncture or burn, even after use.

Do not to cut open, to punch, to prick, expose to temperatures above 50 C°, sunlight, exposure to radiant heat or fire, even when empty.

SECTION 14: Transport information**14.1 UN number or ID number: UN 1950****14.2 UN proper shipping name:**

ADR/RID: AEROSZOLS, flammable

IMDG; IATA: AEROSOLS, flammable

14.3 Transport hazard class(es):

ADR/RID:

Class: 2



- Classification code:** 5F
Labels: 2.1
Limited quantity: 1 L
Transport category (Tunnel restriction code): 2(D)
- 14.4 Packing group:** Not applicable.
14.5 Environmental hazards: No.
Marine pollution: No.
14.6 Special precautions for user: See sections 6-8
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

Chemical safety:

- COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- 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 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
- 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
- Public Act No. XXV. of 2000 on Chemical Safety
- Decree 44/2000 (XII.27.) of the Ministry of Economic Affairs and Labour on the detailed rules of certain procedures and activities related to dangerous substances and dangerous preparations
- 34/2014. (X. 30.) NGM Regulation on the marketing requirements for aerosol products and aerosol packaging

Occupational safety:

- 3/2002 (II.8.) Joint Decree SzCsM-EüM on the minimum level of occupational safety and health requirements in workplaces
- Act XCIII of 1993 on Occupational Safety and Health
- (XII. 22.) EüM Decree 65/1999 on the minimum safety and health protection requirements for the use of personal protective equipment by workers at work
- ITM Decree 5/2020 (II. 6.) on the protection of the health and safety of workers exposed to chemical agents

Hazardous wastes:

- Act CLXXXV of 2012 on Waste
- 225/2015 (VIII.7.) Gov. Regulation on detailed rules for certain activities related to hazardous waste



- 442/2012 (XII. 29.) Gov. Regulation on packaging and waste management activities related to packaging waste
- 72/2013 (VIII. 27.) VM Regulation on the List of Waste

Delivery:

- 61/2013 (X. 17.) NFM Decree on the domestic application of Annexes A and B of the European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR)

15.2 Chemical safety assessment: The supplier has not carried out a chemical safety assessment.

SECTION 16: Other information

- a) This document is a translation of the product hungarian safety data sheet version 2 dated 22. november 2022.
- b) Abbreviations used in the data sheet:
 - CAS number: CAS number is the Chemical Abstracts Service registration number used to identify chemicals (chemical elements, compounds).
 - PBT: Persistent, bioaccumulative and toxic
 - vPvB: Very persistent and very bioaccumulative
 - LD50: Lethal dose in 50% of the studied population (medium lethal dose)
 - LC50: Lethal concentration in 50% of the studied population
 - ADR: European Agreement on the international carriage of dangerous goods by road
 - IMO: International Maritime Organization
 - RID: Rules on the international carriage of dangerous goods by rail
 - ICAO: International Civil Aviation Organisation
- c) The hazard classification was carried out by the supplier according to Regulation (EC) No 1272/2008 (calculation method).
- d) List of relevant hazard (H) statements which are not written out in full under Sections 3:
 - H220 Extremely flammable gas.
 - H222 Extremely flammable aerosol
 - H225 Highly flammable liquid and vapour.
 - H229 Pressurised container: May burst if heated.
 - H280 Contains gas under pressure; may explode if heated.
 - H319 Causes serious eye irritation.
 - H336 May cause drowsiness or dizziness.

The safety data sheet has been prepared in accordance with the applicable EU and Hungarian legislation in force. It is limited to our current knowledge, does not guarantee the properties of the product and does not form the basis of any legal relationship.

