SAFETY DATA SHEET
IN ACCORDANCE WITH REGULATION (EC) 1907/2006 (REACH)
Tar Remover Aerosol

Preparing date: 10 June 2024 **Version: 1**

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

1.1 Product identifier: Tar Remover Aerosol

UFI: 8XYQ-MQTX-2SKV-PPM2

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

Identified uses: Maintenance.
For consumer, industrial and professional use.

Uses advised against: Other than above.

1.3 Details of the supplier of the safety data sheet:
Distributor:

Email address for a competent person responsible for the safety data sheet:

1.4 Emergency telephone number:
Health Toxicological Information Service, Hungary:
06 1 476 6464 (available day and night)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:
in accordance with Regulation (EC) No 1272/2008 (CLP)

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

2.2 Label elements:

Composition: 50-60% Propane/butane/isobutane; 40-50% Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclic, aromatic<2%

GHS02

Danger

Hazard Statement(s):

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

Precautionary Statement(s):

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.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P251 Do not pierce or burn, even after use.
P261 Avoid breathing dust/fume/ gas/mist/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
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.
P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 Dispose of contents/container to: hazardous waste.

Additional hazard information:

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards:

Effects on human health:
Data for SPIRDANE D 60: Vapours can form an explosive mixture with air.
Vapours are heavier than air and may spread near the ground near sources of ignition.
Environmental effects:
No data available.

PBT, vPvB assessment: It does not meet the criteria for PBT or vPvB substances.

SECTION 3: Composition/information on ingredients

3.2 Mixtures:

Identifier	CAS Number	EC Number	REACH Registration Number	Concentration by weight	Classification in accordance with Regulation (EC) No 1272/2008
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics (SPIRDANE D 60 Total aromatic content <0.03%)	-	918-481-9	01-2119457273-39	40-50%	Asp. Tox. 1 H304 EUH066

Propellant mixture:				50 %	
Propane	74-98-6	200-827-9	01-2119486944-21	-	Flam. Gas 1 H220 Press. Gas
Butane	106-97-8	203-448-7	01-2119474691-32	-	Flam. Gas 1 H220 Press. Gas
Isobutane	75-28-5	200-857-2	01-2119485395-27	-	Flam. Gas 1 H220 Press. Gas
(1,3-butadiene content: < 0.1 %)	106-99-0	203-450-8	01-2119471988-16		Muta. 1B H340 Carc. 1A H350

For the full text of H-sentences mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures:

Inhalation:

(Applies to propellant gas) The injured person must be taken to fresh air and kept at rest. In the event of respiratory irritation (cough) or difficulty breathing, call a doctor immediately. If breathing has stopped, a qualified person should start artificial respiration, or if the heart has stopped, cardiopulmonary resuscitation. Giving oxygen can have a beneficial effect if it is given by a qualified person, preferably on medical advice.

Skin contact:

(Applies to propellant gas) Clothing contaminated with the product must be removed immediately. The affected skin surface should be washed with lukewarm water and soap. Do not attempt to rewarm the affected skin on the spot. Do not rub or apply dry heat. Carefully cut around the part of the cloth that adheres to the wound. Cover the casualty loosely with a sterile dressing. Get the injured person to a first aid station or hospital quickly.

Eye contact:

(Applies to propellant gas) The eyes must be thoroughly rinsed with plenty of running water for at least 15 minutes (while pulling the eyelids apart). You need to remove the contact lenses, if you have them, and this is easy to do. Do not attempt to overheat. Cover both eyes with a sterile cloth, then the eye should be shown to a doctor.

Ingestion:

The product is sold in an aerosol bottle, so it is unlikely to be swallowed. In case of accidental ingestion, **do not induce vomiting**, seek medical attention immediately.

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

In high concentrations, it has a suffocating effect, it can cause suffocation, the lack of oxygen can have fatal consequences. *(Fuel gas data)*

SPIRDANE D 60 data:

Eye contact: Eye contact may cause irritation.

Skin contact: Redness. Prolonged and repeated contact can dry out the skin and cause irritation.

Inhalation: Inhalation of vapours or aerosols may irritate the respiratory tract and mucous membranes. Eye irritation. Vapours inhaled in high concentrations have a narcotic effect on the central nervous system.
Ingestion: If accidentally swallowed, the product can enter the lungs due to its low viscosity and cause rapidly developing, very serious lung damage (48-hour medical supervision). Ingestion can cause digestive irritation, nausea, vomiting and diarrhea. Stomach ache. May cause depression of the central nervous system.

4.3 Indication of any immediate medical attention and special treatment needed:
Symptomatic treatment. Show the safety data sheet or label to the doctor if possible.

SECTION 5: Firefighting measures

5.1 Extinguishing media:
Suitable extinguishing media: Extinguishing powder, carbon dioxide (CO_2), extinguishing foam, water spray.
Inappropriate extinguishing media: Strong water jet (can only be used to cool the bottle).

5.2 Special hazards arising from the substance or mixture:
The area must be evacuated. The fire must only be extinguished from a safe distance or from a protected place. Avoid inhalation of hazardous vapours and toxic decomposition products (approach from the windward side). The best way to extinguish a flammable gas fire is to stop the gas leak before starting to extinguish the fire. Due to the aerosol packaging, it is unlikely that a large amount of the product will leak out. The gas can form an explosive mixture with air. The heat from the fire can cause a rapid increase in pressure inside the cylinder and cause the cylinder to explode. Personnel and materials not yet reached by the fire must be moved to safety.
Hazardous combustion products: In case of fire, toxic gases may be released: CO, CO_2, aldehydes, various hydrocarbons and soot.

5.3 Advice for firefighters:
Protective equipment: Full fireproof protective equipment. In case of fire, a self-contained breathing apparatus must be worn.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:
For non-emergency personnel: Unauthorized persons must be kept away. Ignition sources must be removed. Adequate ventilation must be ensured. Avoid contact with skin or eyes. The vapor/spray of the product must not be inhaled. Full protective equipment and a self-contained breathing apparatus must be worn. Do not touch or step on spilled material.
For emergency responders: Unauthorized persons must be kept away. Ignition sources must be removed. Adequate ventilation must be ensured. Avoid contact with skin or eyes. The vapour/spray of the product must not be inhaled. Full protective equipment and a self-contained breathing apparatus must be worn. Do not touch or step on spilled material.

6.2 Environmental precautions:
The product must not be discharged into the sewer or the waters. Due to the small aerosol packaging, leakage of a large amount is unlikely. If the spilled material (propellant gas) gets into the sewer network, there is a risk of explosion. All deeper and more distant sources of ignition must be eliminated.

6.3 Methods and material for containment and cleaning up:

Stop the leak if it is safe to do so. Use a water spray to reduce the concentration of the gas. Seal off the area until the gas dissipates. It must be disposed of in accordance with the regulations. Only non-sparking devices may be used. Shut down all machines and equipment that can cause sparks or flames.

6.4 Reference to other sections:

See Section 8 for information on personal protective equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:

It can only be used in a well-ventilated area! It must be kept away from heat and sources of ignition. The rules for pressurized containers must be observed. Avoid inhaling the spray of the mixture, getting it on the skin, getting it in the eyes, and swallowing it. Risk of fire and explosion: Maintenance work may only be carried out in COLD, DEGASSED and VENTILATED storage. There is overpressure in the device. Do not open, knock, puncture, expose to temperatures above 50°C, sunlight, radiant heat or throw into fire, even when empty! Do not spray on an open flame or glowing material. Refilling the device is prohibited! No smoking! Do not use abrasives, solvents or fuels.

7.2 Conditions for safe storage, including any incompatibilities:

Individual storage requirements: Ensure adequate ventilation. Electrostatic charging must be prevented. It should be stored in a dry, cool place at a temperature below 35°C. It must be kept away from heat and sources of ignition. Keep away from children and separate from food! Do not eat, drink or smoke during use. Incompatible materials: Strong oxidizing agents (e.g. perchlorates), strong acids.

7.3 Specific end use(s): Maintenance. For consumer, industrial and professional use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters:

The permitted average concentrations and permitted peak concentrations of dangerous substances in the air at the workplace and their characteristic properties according to Decree No. 5/2020 (II. 6.) ITM on the Protection of the Health and Safety of Workers from the Risks Related to Chemical Pathological Factors (Hungary):

Substance	CAS Number	ÁK-value mg/m^3	CK-value mg/m^3	Characteristics	Reference	ÁK correction group
n-BUTANE	106-97-8	2350	9400			N
1,3-BUTADIENE	106-99-0	2,2		k(1A), i	EU6	T

N Irritants, simple asphyxiants, low health hazards. Correction is NOT necessary.
T Substances that have a harmful effect on health after LONG-TERM exposure. Corrected ÁK = ÁK × 40/hours per week.
i Irritant substance that irritates the skin, mucous membranes, eyes, or all three.
k(…) Carcinogenic (classification according to the European Parliament and Council Regulation 1272/2008/EC, under another name: CLP Regulation).

EU6 Value stated in EU Directive 2019/130
ÁK-value Permitted average concentration.
CK-value Permitted peak concentration.
CAS number Chemical Abstracts Service registration number used to identify chemical substances.

8.2 Exposure controls:

According to Regulation 5/2020. (II. 6.) ITM: In the case of a hazardous substance not regulated by a limit value, the employer is obliged to reduce the level of exposure to the lowest level expected according to scientific and technical standards, at which level, according to the current state of science, the hazardous substance has no health-damaging effect.

Appropriate engineering controls:

The product must be used in a well-ventilated room with non-sparking devices.

Individual protection measures, such as personal protective equipment:

Eye/face protection:

Safety glasses/face shields with side shields are required if there is a risk of splashing.

Skin protection:

Protective gloves. (EN 374)

In case of repeated or prolonged exposure: nitrile rubber, PVA protective gloves must be worn.

In case of splashing: neoprene chloroprene, nitrile rubber protective gloves must be worn.

Long-sleeved protective clothing is required if direct contact or splashing may occur.

Respiratory protection:

Adequate, non-sparking ventilation (general ventilation, local exhaust) is required.

If exposure exceeding the permissible limit value in the workplace airspace may occur, then the use of respiratory protection is justified.

Thermal hazards:

Not known.

Environmental exposure controls

The product and waste from it must be prevented from entering living water, soil and public sewers.

Local, national and waste water regulations must be complied with.

Other precautions: Keep away from food, drink and feed.

Hands must be washed after working hours and before breaks.

It is forbidden to eat, drink or smoke while working.

Hands should not be wiped with rags contaminated with the product.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

a)	Physical state:	Aerosol
b)	Colour:	Colorless
c)	Odour:	Petroleum, solvent.
	Odour threshold:	No data available.
d)	Melting point/freezing point:	No data available. PB 4.2 T data: -187.6- -138.3°C ISO 3405

e)	Boiling point or initial boiling point and boiling range: Undetermined.	PB 4.2 T data: -104- -60°C SPIRDANE D 60 data: 175-235 °C (EN ISO 3405)
f)	Flammability:	Extremely flammable aerosol.
g)	Lower and upper explosion limit:	No data available. SPIRDANE D 60 data: 0.6-7 tf%
h)	Flash point:	No data available. SPIRDANE D 60 data: > 63°C
i)	Auto-ignition temperature:	Undetermined. PB 4.2 T data: 287-537°C SPIRDANE D 60 data: > 230°C (ASTM E 659)
j)	Decomposition temperature:	No data available.
k)	pH:	Not applicable.
l)	Kinematic viscosity:	No data available. SPIRDANE D 60 data: <20.5mm^2/s (ASTM E 659)
m)	Solubility:	Insoluble in water. PB 4.2 T data: 24.4-60.4 mg/l in water
n)	Partition coefficient n-octanol/water (log value): No data available.	
o)	Vapour pressure:	No data available. PB 4.2 T data: <=1600 kPa (at 70°C) SPIRDANE D 60 data: 0.38 hPa
p)	Density and/or relative density:	No data available. PB 4.2 T data: >=0.505 g/cm^3 (at 50°C) SPIRDANE D 60 data: 800 kg/m^3 (at 15 °C) ISO 12185
q)	Relative vapour density:	No data available.
r)	Particle characteristics	No data available.

9.2 Other information:
No other information is available.

SECTION 10: Stability and reactivity

10.1 Reactivity: Not known.

10.2 Chemical stability: Stable under normal use.

10.3 Possibility of hazardous reactions:
PB 4.2 T data: Contact with strong oxidizing agents (peroxides, chromates, etc.) may cause a fire hazard.

10.4 Conditions to avoid: Keep away from heat, sources of ignition, hot surfaces, sparks, and open flames.

10.5 Incompatible materials: Strong oxidizers, strong acids.
PB 4.2 T data: A mixture containing nitrates and other oxidizing agents (e.g. chlorates, perchlorates, liquid oxygen) can form an explosive mixture.

10.6. Hazardous decomposition products: In case of fire, toxic gases may be released: CO, CO_2, aldehydes, various hydrocarbons, soot.

SECTION 11: Toxicological information

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

- acute toxicity: Based on available data, the classification criteria are not met.

  PB 4.2 T data:
  Propane: 1443 mg/l (inhalation, rat) (literature data)
  n-Butane: 658 mg/l (inhalation, rat) (literature data)
  Isobutane: 974 mg/l (inhalation, mouse) (literature data)
  SPIRDANE D 60 data:
  LD50 Oral: LD50 > 5000 mg/kg body weight (rat - OECD 401)
  LD50 Dermal: LD50 (24h) > 2000 mg/kg body weight (rat - OECD 402)
  LC50 Inhalation: LC50(8h) > 5000 mg/m3 (rat - vapor - OECD 403)

- skin corrosion/irritation: Based on available data, the classification criteria are not met. Non-irritating. Risk of frostbite/burns.
- serious eye damage/irritation: Based on available data, the classification criteria are not met.
  Non-irritating (risk of frostbite/burns).
- respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
  It is not toxic, but it is dangerous due to the aspheric (lack of oxygen) effect. It can have a narcotic effect when inhaled in high concentrations.
- 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: Based on available data, the classification criteria are not met.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- aspiration hazard: Ingestion of the product is unlikely.

11.2 Information on other hazards:

Delayed and immediate effects from short and long-term exposure, as well as chronic effects: Due to lack of data, the classification criteria are not met.
Information on likely routes of exposure: Inhalation, skin contact, eye contact. Ingestion is unlikely.

SECTION 12: Ecological information

12.1 Toxicity: The mixture must not be discharged into living water, public sewers or the soil.
PB 4.2 T data:
Butane: LC50: 24.11 mg/l (fish, literature data), LC50: 14.22 mg/l (other aquatic organisms, literature data) EC50 96 hours: 7.71 mg/l (algae, literature data)
Isobutane: LC50: 27.98 mg/l (fish, literature data), LC50: 16.33 mg/l (other aquatic organisms, literature data) EC50, 96 hours: 89.57 mg/l (algae, literature data)

Propane: LC50: 49.47 mg/l (fish, literature data), LC50: 27.14 mg/l (other aquatic organisms, literature data) EC50, 72 hours: 11.89 mg/l (algae, literature data)
SPIRDANE D 60 data:
Acute aquatic toxicity:
Toxicity to algae: ErL50 (72h) > 1000 mg/l (Pseudokirchneriella subcapitata - OECD 201) EbL50 (72h) > 1000 mg/l
Toxicity to daphnia and other aquatic invertebrates: EL50 (48h) > 1000 mg/l (Daphnia magna - OECD 202)
Toxicity to fish: LL50 (96h) > 1000 mg/l (Oncorhynchus mykiss - OECD 203)
Chronic aquatic toxicity:
Toxicity to algae: NOELR (72h) = 1000 mg/l (Pseudokirchneriella subcapitata - biomass - OECD 201) NOELR (72h) = 1000 mg/l (Pseudokirchneriella subcapitata - growth rate - OECD 201)
Toxicity to daphnia and other aquatic invertebrates: NOELR (21d) = 0.18 mg/l (Daphnia magna - QSAR Petrotox)
Toxicity to fish: NOELR (28d) = 0.10 mg/l (Oncorhynchus mykiss - QSAR Petrotox)

12.2 Persistence and degradability: No data are available for this product.

12.3 Bioaccumulative potential: No data are available for this product.
PB heating and fuel (propane/butane) (mixture):
propane: ≤ 2.8 (literature data)
butane: ≤ 2.8 (literature data)
isobutane: ≤ 2.8 (literature data)

12.4 Mobility in soil: No data are available.

12.5 Results of PBT and vPvB assessment: No data are available.

12.6 Endocrine disrupting properties: No data are available.

12.7 Other adverse effects: No data are available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:
Disposal of the substance/mixture: It may be disposed of in accordance with local regulations. [Government Decree 225/2015. (VIII. 7.) on the detailed rules of certain activities related to hazardous waste]
Contaminated packaging must be disposed of in accordance with local regulations.
disposal: [Government Decree 442/2012. (XII. 29.) on packaging and waste management activities related to packaging waste]
Waste identification code: 16 05 04* gases containing dangerous substances stored in pressure-resistant containers (including halons)
The classification of this product into the appropriate waste identification main group, subgroup and individual waste types depends on the use of the material. The wastes of the source resulting in the formation can be classified into several different main groups with regard to the properties of the given waste, taking into account the relevant regulations.
[Decree 72/2013. (VIII. 27.) VM on the waste list]

SECTION 14: Transport information

14.1 UN number or ID number: UN 1950

14.2 UN proper shipping name: AEROSOLS, flammable

14.3 Transport hazard class(es):

ADR/RID:

Class: 2

Classification code: 5F

Labels: 2.1

Transport category (Tunnel restriction code): 2 (D)

14.4 Packing group: None.

14.5 Environmental hazards: No.

Marine pollution: No.

14.6 Special precautions for user: Not applicable.

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 (CLP)

Act No. XXV. of 2000 on Chemical Safety

Decree No. 44/2000 (XII.27.) EüM on the detailed rules for certain procedures and activities related to dangerous substances and dangerous preparations

Decree No. 34/2014. (X. 30.) NGM on the requirements for the distribution of aerosol products and aerosol packaging

Health and safety:

Decree No. 3/2002 (II.08.) SzCsM-EüM concerning the minimum safety and health requirements of workplaces

Act No. XCIII. of 1993 on occupational safety

Decree No. 65/1999 (XII. 22.) EüM on on the minimal safety and health protection requirements regarding the utilization of individual protection tools by workers at the workplaces

Decree No. 5/2020 (II. 6.) ITM on the Protection of the Health and Safety of Workers from the Risks Related to Chemical Pathological Factors

Waste management:
Act No. CLXXXV. of 2012 on Waste
Governmental Decree No. 225/2015 (VIII. 7.) on detailed rules of certain activities related to hazardous waste.
Governmental Decree No. 442/2012 (XII. 29.) on packaging and on waste management activities related to packaging waste
Decree No. 72/2013 (VIII. 27.) VM concerning the list of wastes
Transport:
Decree No. 61/2013 (X. 17.) NFM on the domestic application of Annexes A and B to 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 the first English version of the safety data sheet of the product of the same name. The English translation was based on version 7 of the Hungarian safety data sheet of the product dated 8 June 2022.

b) Explanation of abbreviations and acronyms used in the safety data sheet:
CAS Number: A number used to identify the chemical substance (Chemical Abstracts Service).
PBT substances: Persistent, Bioaccumulative and Toxic substances.
vPvB substances: very Persistent and very Bio-accumulative substances.
LD50: The amount of a dose, given all at once, which causes the death of 50% of a group of test animals (Lethal Dose).
LC50: The amount of a concentration, given all at once, which causes the death of 50% of a group of test animals (Lethal Concentration).
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
IMO: International Maritime Organization.
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
ICAO: International Civil Aviation Organization.

c) The hazard classification was carried out by the supplier according to the 1272/2008/EC. Application of interpolation principles based on the hazard classes of the components.

d) The full text of the H and EUH sentences in Section 3 of the safety data sheet:

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H340 May cause genetic defects.
H350 May cause cancer.

EUH066 Repeated exposure may cause skin dryness or cracking.

e) Hazard classes:

Aerosol 1	Aerosol 1
Flam. Gas 1	Flammable gases
Press. Gas	Gases under pressure
Asp. Tox. 1	Aspiration hazard 1
Muta. 1B	Germ cell mutagenicity 1B
Carc. 1A	Carcinogenicity 1A

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.