

Safety Data Sheet dated 14/12/2022, version 4

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier Mixture identification: Trade name: SPRAY CERCAFUGHE A BOLLE Trade code: 11.025 - 11.075UFI QM00-G0V0-9000-9RG1 1.2. Relevant identified uses of the substance or mixture and uses advised against Recommended use: PRODUCTS FOR AIR CONDITIONING SYSTEMS Uses advised against: do not use on humans and animals 1.3. Details of the supplier of the safety data sheet Company: ELKE S.r.I. Via XXV Aprile 202 10042 Nichelino (To) Italia. Tel. n. +39 011 9622412 Competent person responsible for the safety data sheet: Domenico Amosso info@elke-ac.com 1.4. Emergency telephone number Centro Antiveleni di Milano 02 66101029 (CAV Ospedale Niguarda Ca' Granda -Milano) Centro Antiveleni di Pavia 0382 24444 (CAV IRCCS Fondazione Maugeri - Pavia) Centro Antiveleni di Bergamo 800 883300 (CAV Ospedali Riuniti - Bergamo) Centro Antiveleni di Firenze 055 7947819 (CAV Ospedale Caregoi - Firenze) Centro Antiveleni di Roma 06 3054343 (CAV Policlinico Gemelli - Roma) Centro Antiveleni di Roma 06 49978000 (CAV Policlinico Umberto I - Roma) Centro Antiveleni di Napoli 081 7472870 (CAV Ospedale Cardarelli - Napoli) Centro Antiveleni di Verona 800 011858 (CAV Ospedale AOUI- Verona) Centro Antiveleni di Foggia 800 183459 (CAV Policlinico Riuniti-Foggia) Centro Antiveleni di Roma 06 68593726(CAV Ospedale Bambino Gesù-Roma)

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture
- EC regulation criteria 1272/2008 (CLP):

Danger, Aerosols 1, Extremely flammable aerosol. Pressurized container: may burst if heated.

Adverse physicochemical, human health and environmental effects:

No other hazards 2.2. Label elements Hazard pictograms:



Danger Hazard statements: H222, H229 Extremely flammable aerosol. Pressurized container: may burst if heated. Precautionary statements: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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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. Special provisions according to Annex XVII of REACH and subsequent amendments: None

Product contents: Anionic surfactants < 5 % The product also contains: Allergens: Preservatives: 5-chloro-2-methyl-2H-isothiazol-3-one

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1% Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

- 3.1. Substances
- N.A.
- 3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb	er	Classification
>= 7% - < 10%	ethanediol; ethylene glycol	Index number: CAS: EC: REACH No.:	603-027-00-1 107-21-1 203-473-3 01- 2119456816- 28-xxxx	 3.1/4/Oral Acute Tox. 4 H302 3.9/2 STOT RE 2 H373
>= 7% - < 10%	GPL	CAS: EC: REACH No.:	68476-40-4 270-681-9 01- 2119486557- 22-XXXX	 2.5/C Press Gas (Comp.) H280 2.2/1 Flam. Gas 1 H220 DECLK (CLP)*
>= 0.5% - < 1%	C12-C14 ALCHILDIMETHYLAMI NE, N-OXIDE	CAS: EC:	308062-28-4 931-292-6	 3.1/4/Oral Acute Tox. 4 H302 3.2/2 Skin Irrit. 2 H315 3.3/1 Eye Dam. 1 H318 4.1/A1 Aquatic Acute 1 H400 4.1/C2 Aquatic Chronic 2 H411
781 ppm	Alcohols, C11-13- branched, ethoxylated	CAS: EC:	127036-24-2 603-182-5	 3.1/4/Oral Acute Tox. 4 H302 3.3/1 Eye Dam. 1 H318
130 ppm	D-Glucopyranose, oligomers, decyl octyl glycosides	CAS: EC:	68515-73-1 500-220-1	• 3.3/1 Eye Dam. 1 H318



*DECLK (CLP): This substance is classified in accordance with Note K, Annex VI of EC Regulation CE 1272/2008. The harmonised classification as a carcinogen or mutagen applies unless it can be shown that the substance contains less than 0,1 % w/w 1,3- butadiene (Einecs No 203-450-8), in which case a classification in accordance with Title II of this Regulation shall be performed also for those hazard classes. Where the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102-)P210-P403 shall apply.

SECTION 4: First aid measures

- 4.1. Description of first aid measures
- In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of Ingestion:

- Do NOT induce vomiting.
- In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

- 4.2. Most important symptoms and effects, both acute and delayed
- For symptoms and effects due to the contained substances see chapter 11 4.3. Indication of any immediate medical attention and special treatment needed Treatment:

Follow the doctor's instructions.

SECTION 5: Firefighting measures

- 5.1. Extinguishing media
 - Suitable extinguishing media: CO2 or Dry chemical fire extinguisher. Extinguishing media which must not be used for safety reasons: Water.
- 5.2. Special hazards arising from the substance or mixture Burning produces heavy smoke. Do not inhale explosion and combustion gases.
- 5.3. Advice for firefighters
 - Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Keep containers cool with water spray.

Move undamaged containers from immediate hazard area if it can be done safely. Use fire fighter's clothing conforming to European standard EN469.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures Wear personal protection equipment. Remove all sources of ignition. Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand Retain contaminated washing water and dispose it.

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- 6.3. Methods and material for containment and cleaning up For cleaning up: Wash with plenty of water. Wet clean or vacuum up solids. Clear spills immediately
 6.4. Defense to other continue.
- 6.4. Reference to other sections See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
- Avoid contact with skin and eyes, inhalation of vapours and mists.
 Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
 Advice on general occupational hygiene:
 Do not eat, drink or smoke when using this product.
 Contamined clothing should be changed before entering eating areas.
 Wash hands after use
 7.2. Conditions for safe storage, including any incompatibilities store in a cool, well ventilated place, away from heat, flames, sparks or other sources of ignition keep only in the original container away from sunlight neighborhoods avoid contact with skin and eyes, inhalation of vapours/mists/dusts.

do not use empty containers before they are cleaned.

contaminated clothing must be replaced before entering the dining areas.

at work do not eat or drink.

avoid the accumulation of electrostatic charges.

do not smoke

Store at below 50 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

Incompatible materials:

Keep away from combustible materials.

Instructions as regards storage premises:

Safety electric system.

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters ethanediol; ethylene glycol - CAS: 107-21-1 EU - TWA(8h): 52 mg/m3, 20 ppm - S ACCIH - TWA(8h): 25 ppm - STEL 5

EU - TWA(8h): 52 mg/m3, 20 ppm - STEL: 104 mg/m3, 40 ppm ACGIH - TWA(8h): 25 ppm - STEL: 50 ppm ACGIH - STEL: 10 mg/m3 DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values N.A. 8.2. Exposure controls

Eye protection:

Eye glasses.

Protection for skin:

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No special precaution must be adopted for normal use. Protection for hands:

Protect hands with category II work gloves (ref. Directive 89/686 / EEC and standard EN 374). Use PVC or nitrile rubber gloves.

Respiratory protection:

if the TLV thresholds are exceeded, use a mask with filter type A (against vapors of organic compounds) in accordance with EN 141.

Thermal Hazards:

Do not expose to temperatures exceeding 50° c.

Environmental exposure controls:

emissions from production processes, including those from ventilation equipment should be inspected for the purposes of enforcement of environmental protection

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Physical state:	Liquid		
Colour:	Colourless		
Odour:	characteristic		
Melting point/freezing point:	Not Relevant		
Boiling point or initial boiling point and boiling range:	Not Relevant		
Flammability:	Flammable		
Lower and upper explosion limit:	Not Relevant		
Flash point:	< 0 ° C		
Auto-ignition temperature:	>170°C		
Decomposition	Not Relevant		
temperature:			
pH:	7		
Kinematic viscosity:	N.A.		
Solubility in water:	Not Relevant		
Solubility in oil:	Not Relevant		
Partition coefficient n- octanol/water (log value):	Not Relevant		
Vapour pressure:	3 bar +/- 1		
Density and/or relative	0.930 kg/lt +/-		
density:	0.05		
Relative vapour density:	>2		
	Particle cha	racteristics:	
Particle size:	N.A.		

9.2. Other information

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

avoid contact with strong acids and bases and oxidizing agents.

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- 10.2. Chemical stability Stable under normal conditions
- 10.3. Possibility of hazardous reactions may form explosive vapor / air mixtures in places not well ventilated avoid mixing the product with strong oxidizers and strong acids
- 10.4. Conditions to avoid avoid the accumulation of electrostatic charges. keep away from heat, sources of ignition
- 10.5. Incompatible materials oxidizing agents acids, alkalis and alkaline metals
- 10.6. Hazardous decomposition products during combustion it produces irritating gases by thermal decomposition can rid COx

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 Toxicological information of the product: SPRAY CERCAFUGHE A BOLLE a) acute toxicity Not classified Based on available data, the classification criteria are not met b) skin corrosion/irritation Not classified Based on available data, the classification criteria are not met c) serious eye damage/irritation Not classified Based on available data, the classification criteria are not met d) respiratory or skin sensitisation Not classified Based on available data, the classification criteria are not met e) germ cell mutagenicity Not classified Based on available data, the classification criteria are not met f) carcinogenicity Not classified Based on available data, the classification criteria are not met g) reproductive toxicity Not classified Based on available data, the classification criteria are not met h) STOT-single exposure Not classified Based on available data, the classification criteria are not met i) STOT-repeated exposure Not classified Based on available data, the classification criteria are not met j) aspiration hazard Not classified Based on available data, the classification criteria are not met Toxicological information of the main substances found in the product: ethanediol; ethylene glycol - CAS: 107-21-1 a) acute toxicity: Test: LD50 - Route: Oral - Species: Rat = 7712 mg/kg Test: LD50 - Route: Skin - Species: Mouse > 3500 mg/kg



Test: LC50 - Route: Inhalation - Species: Rat > 2.5 mg/kg - Duration: 8h GPL - CAS: 68476-40-4 a) acute toxicity: Test: LC50 - Route: Inhalation - Species: Rat > 658 mg/l ethanediol; ethylene glycol - CAS: 107-21-1 LD50 (RABBIT) ORAL: 5017 MG/KG BW

11.2. Information on other hazards Endocrine disrupting properties: No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

- 12.1. Toxicity Adopt good working practices, so that the product is not released into the environment. SPRAY CERCAFUGHE A BOLLE Not classified for environmental hazards Based on available data, the classification criteria are not met ethanediol; ethylene glycol - CAS: 107-21-1 a) Aquatic acute toxicity: Endpoint: LC50 - Species: Fish = 72860 mg/l - Duration h: 96 Endpoint: EC50 - Species: Daphnia > 100 mg/l - Duration h: 48 Endpoint: EC50 - Species: Algae 6500-13000 mg/l - Duration h: 96 GPL - CAS: 68476-40-4 a) Aquatic acute toxicity: Endpoint: LC50 - Species: Fish Negative 19 mg/l - Duration h: 96 Endpoint: LC50 - Species: Daphnia Negative 14.2 mg/l - Duration h: 48 Endpoint: EC50 - Species: Algae Negative 7.7 mg/l - Duration h: 96 12.2. Persistence and degradability None N.A. 12.3. Bioaccumulative potential N.A. 12.4. Mobility in soil N.A. 12.5. Results of PBT and vPvB assessment vPvB Substances: None - PBT Substances: None 12.6. Endocrine disrupting properties
 - No endocrine disruptor substances present in concentration >= 0.1%
 - 12.7. Other adverse effects None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force. Additional disposal information:

contaminated packaging should be sent for recovery or disposal in compliance with national regulations on waste management

reuse if possible. Product residues are to be considered hazardous waste. disposal must be entrusted to authorised waste management, in compliance with national and, where appropriate, local.

SECTION 14: Transport information

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14.1. UN number or ID number	
ADR-UN number:	1950
IATA-Un number:	1950
IMDG-Un number:	1950
14.2. UN proper shipping name	
ADR-Shipping Name:	FLAMMABLE AEROSOLS
IATA-Technical name:	FLAMMABLE AEROSOLS
IMDG-Technical name:	FLAMMABLE AEROSOLS
14.3. Transport hazard class(es)	
ADR-Class:	2.5°F CAP. 2.2.2.1.6 UN1950
IATA-Class:	2.1
IMDG-Class:	2 Aerosols UN 1950
14.4. Packing group	
ADR-Packing Group:	N.A.
IATA-Packing group:	N.A.
IMDG-Packing group:	N.A.
14.5. Environmental hazards	
Marine pollutant:	No
14.6. Special precautions for user	
ADR-Transport category (Tunr	
IMDG-Technical name:	FLAMMABLE AEROSOLS
14.7. Maritime transport in bulk accor	ding to IMO instruments
N.A.	

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Dir. 98/24/EC (Risks related to chemical agents at work) Dir. 2000/39/EC (Occupational exposure limit values) Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP) Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013 Regulation (EU) n. 2020/878 Regulation (EU) n. 286/2011 (ATP 2 CLP) Regulation (EU) n. 618/2012 (ATP 3 CLP) Regulation (EU) n. 487/2013 (ATP 4 CLP) Regulation (EU) n. 944/2013 (ATP 5 CLP) Regulation (EU) n. 605/2014 (ATP 6 CLP) Regulation (EU) n. 2015/1221 (ATP 7 CLP) Regulation (EU) n. 2016/918 (ATP 8 CLP) Regulation (EU) n. 2016/1179 (ATP 9 CLP) Regulation (EU) n. 2017/776 (ATP 10 CLP) Regulation (EU) n. 2018/669 (ATP 11 CLP) Regulation (EU) n. 2018/1480 (ATP 13 CLP) Regulation (EU) n. 2019/521 (ATP 12 CLP) Regulation (EU) n. 2020/217 (ATP 14 CLP) Regulation (EU) n. 2020/1182 (ATP 15 CLP) Regulation (EU) n. 2021/643 (ATP 16 CLP) Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications: None Where applicable, refer to the following regulatory provisions : Directive 2012/18/EU (Seveso III) Regulation (EC) nr 648/2004 (detergents). Dir. 2004/42/EC (VOC directive)

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- Provisions related to directive EU 2012/18 (Seveso III): Seveso III category according to Annex 1, part 1 Product belongs to category: P3a
- 15.2. Chemical safety assessment No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Text of phrases referred to under heading 3:

H302 Harmful if swallowed.

H373 May cause damage to organs through prolonged or repeated exposure.

H280 Contains gas under pressure; may explode if heated.

H220 Extremely flammable gas.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Hazard class and	Code	Description
hazard category		
Flam. Gas 1	2.2/1	Flammable gas, Category 1
Aerosols 1	2.3/1	Aerosol, Category 1
Press Gas (Comp.)	2.5/C	Gases under pressure (Compressed gas)
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
STOT RE 2	3.9/2	Specific target organ toxicity - repeated
		exposure, Category 2
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2

Paragraphs modified from the previous revision:

SECTION 1: Identification of the substance/mixture and of the company/undertaking SECTION 9: Physical and chemical properties

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Aerosols 1, H222, H229	On basis of test data

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.



It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical
	Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport
	Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.