

Safety Data Sheet SPRAY PULITORE ADDITIVO UV ELKE S.r.l. VIA XXV APRILE 202, 10042, NICHELINO (TO) ITALIA REA di TO: 987683 P.Iva 08613670010

Safety Data Sheet dated 9/11/2022, version 4

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

1.1. Product identifier

Mixture identification:

Trade name: SPRAY PULITORE CONDENSATORI

Trade code: 11.022

UFI: XH00-005K-Y00H-NDVY

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

Recommended use:

PRODUCTS FOR AIR CONDITIONING SYSTEMS

product for cleaning and washing

Uses advised against:

do not use for purposes other than those indicated.

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 Careggi - 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.

Warning, Eye Irrit. 2, Causes serious eye irritation.

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.

H319 Causes serious eye irritation.

Precautionary statements:

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.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

P337+P313 If eye irritation persists: Get medical advice/attention.

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:

Phosphates, Non-ionic surfactants

< 5 %

The product also contains:

Allergens:

Preservatives: Compounds of quaternary ammonium, benzyl-C12-16-alkyldimethyl,

chlorides

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. Number		Classification
>= 12.5% - < 15%	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)*
>= 3% - < 5%	1-methoxy-2-propanol; monopropylene glycol methyl ether	Index number: CAS: EC: REACH No.:	603-064-00-3 107-98-2 203-539-1 01- 2119457435- 35-xxxx	2.6/3 Flam. Liq. 3 H226 3.8/3 STOT SE 3 H336
>= 1% - < 3%	Tetrapotassium pyrophosphate	CAS: EC: REACH No.:	2119489369- 18-xxxx	3.3/2 Eye Irrit. 2 H319
>= 1% - < 3%	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
883 ppm	Compounds of quaternary ammonium, benzyl-C12-16-alkyldimethyl, chlorides	Index number: CAS:	270-325-2 68424-85-1	 3.1/4/Oral Acute Tox. 4 H302 3.3/1 Eye Dam. 1 H318 4.1/C1 Aquatic Chronic 1 H410 3.2/1B Skin Corr. 1B H314 4.1/A1 Aquatic Acute 1 H400
88 ppm	dipentene; limonene;	Index number: CAS: EC: REACH No.:	601-029-00-7 5989-27-5 227-813-5 01- 2119529223- 47-xxxx	2.6/3 Flam. Liq. 3 H226 3.2/2 Skin Irrit. 2 H315 3.4.2/1 Skin Sens. 1 H317 4.1/C1 Aquatic Chronic 1 H410

*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:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

Follow the doctor's instructions.

SECTION 5: Firefighting measures

5.1. Extinguishing media



Suitable extinguishing media:

CO2 or Dry chemical fire extinguisher.

In case of fire, use a foam fire extinguisher to extinguish.

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

Normal elements for fire fighting, such as a self-contained compressed air open-circuit respirator (EN 137), fire-retardant suit (EN469), flame-retardant gloves (EN 659) and fire boots (HO A29 or A30).

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.

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.

6.3. Methods and material for containment and cleaning up

For containment:

Limit in case of leakage of significant quantities of product. Contain the spread of small quantities of product with earth, sand or other inert absorbent material.

For cleaning up:

Wash with plenty of water.

Wet clean or vacuum up solids.

Clear spills immediately

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.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

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

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 acids.

Keep away from water or from damp surroundings.

See subsection 10.5

Instructions as regards storage premises:

Cool and adequately ventilated.

Safety electric system.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

1-methoxy-2-propanol; monopropylene glycol methyl ether - CAS: 107-98-2 EU - TWA(8h): 375 mg/m3, 100 ppm - STEL: 563 mg/m3, 150 ppm

ACGIH - TWA(8h): 50 ppm - STEL: 100 ppm

DNEL Exposure Limit Values

dipentene; limonene; - CAS: 5989-27-5

Worker Professional: 33.3 mg/kg/d - Consumer: 8.33 mg/kg/d - Exposure: Human

Inhalation - Frequency: Long Term, systemic effects

Consumer: 4.76 mg/kg/d - Exposure: Human Oral - Frequency: Long Term, systemic

effects

PNEC Exposure Limit Values

dipentene; limonene; - CAS: 5989-27-5

Target: Soil (agricultural) - Value: 0.262 mg/kg

Target: Fresh Water - Value: 0.0054 mg/l Target: Marine water - Value: 0.00054 mg/l

Target: Freshwater sediments - Value: 1.32 mg/kg

Target: Marine water sediments - Value: 0.13 mg/kg

8.2. Exposure controls

Eye protection:

Eye glasses with side protection. EN 166

Protection for skin:

Wear work clothes with long sleeves and protective footwear for professional use of category II (ref.Directive 89/686 / CEE and norm EN ISO 20344). Wash with soap and water after removing protective clothing.

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:
do not dispose of the product in the environment 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:	Yellow		
Odour:	perfumed of essence		
Melting point/freezing point:	Not Relevant		
Boiling point or initial boiling point and boiling range:	Not Relevant		
Flammability:	Not Relevant		
Lower and upper explosion limit:	Not Relevant		
Flash point:	< 0°C		
Auto-ignition temperature:	Not Relevant		
Decomposition temperature:	Not Relevant		
pH:	10,5		
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:	5 bar +/- 1 20°C		
Density and/or relative density:	0.850 +/- 0.05 kg/l		
Relative vapour density:	>2		

Particle characteristics:

Dorticlo cizo:			
	ΙΝΙΔ	 	
LEALUGE SIZE.			

9.2. Other information

Properties	Value	Method:	Notes:
Explosive properties:	Not Relevant		

SECTION 10: Stability and reactivity

10.1. Reactivity

alkaline product. do not mix with acidic substances

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

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

strong acids

10.5. Incompatible materials

oxidizing agents

strong acids and flammable liquids

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 PULITORE CONDENSATORI

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

The product is classified: Eye Irrit. 2 H319

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:

GPL - CAS: 68476-40-4

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat > 658 mg/l

dipentene; limonene; - CAS: 5989-27-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 4400 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg

1-methoxy-2-propanol; monopropylene glycol methyl ether - CAS: 107-98-2

LD50 (RABBIT) ORAL: 8 G/KG (8000 MG/KG)



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 PULITORE CONDENSATORI

Not classified for environmental hazards

Based on available data, the classification criteria are not met

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

dipentene; limonene; - CAS: 5989-27-5

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Algae = 150 mg/l - Duration h: 72 Endpoint: EC50 - Species: Daphnia = 0.85 mg/l - Duration h: 24 Endpoint: LC50 - Species: Fish = 0.72 mg/l - Duration h: 96

12.2. Persistence and degradability

None

dipentene; limonene; - CAS: 5989-27-5

Biodegradability: Not persistent and Biodegradable

12.3. Bioaccumulative potential

dipentene; limonene; - CAS: 5989-27-5 Bioaccumulation: Bioaccumulative

12.4. Mobility in soil

dipentene; limonene; - CAS: 5989-27-5

Mobility in soil: Mobile

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

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 (Tunnel restriction code): D IMDG-Technical name: FLAMMABLE AEROSOLS

14.7. Maritime transport in bulk according to IMO instruments

Product is not allowed to be transported in bulk.

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)

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:

H280 Contains gas under pressure; may explode if heated.

H220 Extremely flammable gas.

H226 Flammable liquid and vapour.

H336 May cause drowsiness or dizziness.

H319 Causes serious eye irritation.

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H410 Very toxic to aquatic life with long lasting effects.

H314 Causes severe skin burns and eye damage.

H400 Very toxic to aquatic life.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

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)	
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3	
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4	
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B	
Skin Irrit. 2	3.2/2	Skin irritation, Category 2	
Eye Dam. 1	3.3/1	Serious eye damage, Category 1	
Eye Irrit. 2	3.3/2	Eye irritation, Category 2	
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1	
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure,	
		Category 3	
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1	
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1	

This safety data sheet has been completely updated in compliance to Regulation 2020/878. 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
Eye Irrit. 2, H319	Calculation method

The assignment of supplemental label elements to this aerosol mixture has been evaluated by excluding the propellant.

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.