



Scheda di sicurezza
LIQUIDO PER NEBULIZZATORE
ELKE S.r.l.
VIA XXV APRILE 202, 10042, NICHELINO (TO) ITALIA
REA di TO: 987683 P.Iva 08613670010
Tel. n. +39 011 9622412

Safety Data Sheet dated 5/1/2022, version 5

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

1.1. Product identifier

Mixture identification:

Trade name: LIQUIDO PER NEBULIZZATORE

Trade code: 13.701/1 – 13.701/5 – 13.703L – 13.703M – 13.703P –
13.704L – 13.704M – 13.704P

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

do not use for purposes other than those indicated.

1.3. Details of the supplier of the safety data sheet

Company:

ELKE S.r.l. 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)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

Product contents:

The product also contains:

Allergens: 6-OCTEN-1-OL,3,7-DIMETHYL



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Preservatives: reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7]; and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)

2.3. Other hazards
vPvB Substances: None - PBT Substances: None
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
>= 1% - < 3%	propan-2-ol; isopropyl alcohol; isopropanol	Index 603-117-00-0 number: CAS: 67-63-0 EC: 200-661-7 REACH No.: 01-2119457558-25-xxxx	2.6/2 Flam. Liq. 2 H225 3.3/2 Eye Irrit. 2 H319 3.8/3 STOT SE 3 H336
25 ppm	1-methoxy-2-propanol; monopropylene glycol methyl ether	Index 603-064-00-3 number: CAS: 107-98-2 EC: 203-539-1 REACH No.: 01-2119457435-35-xxxx	2.6/3 Flam. Liq. 3 H226 3.8/3 STOT SE 3 H336

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 under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

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:



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Suitable extinguishing media: The product is not flammable, all known extinguishing means can be used

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Hazardous combustion products:

Organic irritants

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 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.

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

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

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

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

do not smoke

Keep away from food, drink and feed.

Incompatible materials:



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- Keep away from acids.
Keep away from combustible materials.
See subsection 10.5
Instructions as regards storage premises:
Cool and adequately ventilated.
- 7.3. Specific end use(s)
None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

- propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0
ACGIH - TWA(8h): 200 ppm - STEL: 400 ppm
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

- propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0
Consumer: 319 mg/kg/d - Exposure: Human Dermal - Frequency: Long Term (repeated)
Consumer: 89 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term (repeated)
Consumer: 26 mg/kg/d - Exposure: Human Oral - Frequency: Long Term (repeated)
Consumer: 888 mg/kg/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Consumer: 500 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

- propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0
Target: Fresh Water - Value: 140.9 mg/l
Target: Marine water - Value: 140.9 mg/l
Target: Freshwater sediments - Value: 552 mg/kg
Target: Marine water sediments - Value: 552 mg/kg
Target: Soil (agricultural) - Value: 28 mg/kg

8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

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:
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Appearance and colour:	Liquid	--	--
Odour:	perfumed of essence	--	--
Odour threshold:	Not Relevant	--	--
pH:	7 +/-1	--	--
Melting point / freezing point:	<0°C	--	--
Initial boiling point and boiling range:	>90°C	--	--
Flash point:	Not applicable ° C	--	--
Evaporation rate:	Not Relevant	--	--
Solid/gas flammability:	Not Relevant	--	--
Upper/lower flammability or explosive limits:	Not Relevant	--	--
Vapour pressure:	Not Relevant	--	--
Vapour density:	Not Relevant	--	--
Relative density:	1.00 Kg/l +/- 0.05	--	--
Solubility in water:	complete	--	--
Solubility in oil:	insoluble	--	--
Partition coefficient (n-octanol/water):	Not Relevant	--	--
Auto-ignition temperature:	Not Relevant	--	--
Decomposition temperature:	Not Relevant	--	--
Viscosity:	Not Relevant	--	--
Explosive properties:	Not Relevant	--	--
Oxidizing properties:	Not Relevant	--	--

9.2. Other information

Properties	Value	Method:	Notes:
kinematic viscosity:	kv <= 14	--	--
Miscibility:	Not Relevant	--	--
Fat Solubility:	Not Relevant	--	--
Conductivity:	Not Relevant	--	--
Substance Groups relevant properties	Not Relevant	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity

avoid contact with strong acids and bases and oxidizing agents.

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

strong acids

keep away from heat, sources of ignition

10.5. Incompatible materials

acids, alkalis and alkaline metals



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- oxidizing agents
10.6. Hazardous decomposition products
during combustion it produces irritating gases

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

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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:

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 5840 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

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Not classified for environmental hazards

Based on available data, the classification criteria are not met

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia > 100 mg/l - Duration h: 48



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Endpoint: EC50 - Species: Algae > 100 mg/l - Duration h: 72

Endpoint: EC50 - Species: Fish > 100 mg/l - Duration h: 48

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. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. 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

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

ADR-Class: Not dangerous

IATA-Class: Not dangerous

IMDG-Class: Not dangerous

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

Marine pollutant: No

N.A.

14.6. Special precautions for user

N.A.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No

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) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP)



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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

None

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:

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H226 Flammable liquid and vapour.

Hazard class and hazard category	Code	Description
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3

Paragraphs modified from the previous revision:

SECTION 1: Identification of the substance/mixture and of the company/undertaking
SECTION 2: Hazards identification
SECTION 3: Composition/information on ingredients
SECTION 5: Firefighting measures
SECTION 6: Accidental release measures
SECTION 7: Handling and storage
SECTION 8: Exposure controls/personal protection
SECTION 9: Physical and chemical properties



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SECTION 10: Stability and reactivity
SECTION 12: Ecological information
SECTION 13: Disposal considerations
SECTION 15: Regulatory information
SECTION 16: Other information

This mixture is not classified as hazardous on basis of test data for physical hazards and on basis of calculation method for health and environmental hazards

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.