

**Safety Data Sheet dated 3/12/2020, version 4**

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

1.1. Product identifier

Mixture identification:

Trade name: Additive, leak location 0.0004 I

Trade code: V60-17-0012

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:

VIEROL AG, Karlstraße 19, 26123 Oldenburg, Germany

Tel. n. +49 441 210 20-0

Competent person responsible for the safety data sheet:

info@vierol.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)

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**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, STOT SE 3, May cause drowsiness or dizziness.

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.  
H336 May cause drowsiness or dizziness.

#### Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P103 Read carefully and follow all instructions.  
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.  
P271 Use only outdoors or in a well-ventilated area.  
P405 Store locked up.  
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.  
P501 Dispose of contents/container in accordance with applicable regulations.

#### Special Provisions:

EUH206 Warning! Do not use together with other products. May release dangerous gases (chlorine).

#### Contains

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics  
derogation 1.3.3. Aerosols and containers fitted with a sealed spray device and containing substances or mixtures classified as hazardous in the event of aspiration  
As regards the application of point 3.10.4, substances or mixtures classified according to the criteria set out in points 3.10.2 and 3.10.3 do not necessarily bear on the label indications relating to this danger when they are placed on the market in aerosol containers or in containers fitted with a sealed spray device

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

None

#### Product contents:

Aliphatic hydrocarbons > 30 %

The product also contains:

Allergens:

Preservatives:

#### 2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

sezione 10.3




## 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
>= 60% - < 70%	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	CAS: 64742-48-9	 2.6/3 Flam. Liq. 3 H226
		EC: 919-857-5	 3.8/3 STOT SE 3 H336
		REACH No.: 01-	 3.10/1 Asp. Tox. 1 H304
		2119463258-	

		33-xxxx	EUH066
>= 20% - < 25%	propane	Index number: 601-003-00-5 CAS: 74-98-6 EC: 200-827-9 REACH No.: 01-2119486944-21-0046	 2.2/1 Flam. Gas 1 H220  2.5 Press. Gas H280
>= 12.5% - < 15%	Hydrocarbons, C4; Petroleum gas	Index number: 649-113-00-2 CAS: 87741-01-3 EC: 289-339-5 REACH No.: 01-2119480480-41-xxxx	 2.5 Press. Gas H280  2.2/1 Flam. Gas 1 H220 DECLK (CLP)*

\*DECLK (CLP): This substance is classified in accordance with Note K, Annex VI of EC Regulation CE 1272/2008. The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w 1,3-butadiene (Einecs No 203-450-8). If the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102-)P210-P403 should apply. This note applies only to certain complex oil-derived substances in Part 3.

## 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.

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

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.

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.
- Burning produces heavy smoke.
- 5.3. Advice for firefighters
  - Use suitable breathing apparatus .
  - Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
  - Move undamaged containers from immediate hazard area if it can be done safely.

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## **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.
  - Retain contaminated washing water and dispose it.
  - 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
- 6.3. Methods and material for containment and cleaning up
  - Wash with plenty of water.
- 6.4. Reference to other sections
  - See also section 8 and 13

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## **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:
    - Contaminated clothing should be changed before entering eating areas.
    - Do not eat or drink while working.
- 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.
  - do not smoke
  - avoid the accumulation of electrostatic charges.
  - 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:
    - None in particular.
  - Instructions as regards storage premises:
    - Cool and adequately ventilated.

7.3. Specific end use(s)  
agente sgrassante di superficie

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

propane - CAS: 74-98-6

ACGIH

### DNEL Exposure Limit Values

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics - CAS: 64742-48-9

Worker Professional: 208 mg/kg/d - Consumer: 125 mg/kg/d - Exposure: Human

Dermal - Frequency: Long Term (repeated)

Worker Professional: 871 mg/kg/d - Consumer: 185 mg/kg/d - Exposure: Human

Inhalation - Frequency: Long Term (repeated)

Consumer: 125 mg/kg/d - Exposure: Human Oral - Frequency: Long Term (repeated)

### PNEC Exposure Limit Values

N.A.

### 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:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

#### Respiratory protection:

Use adequate protective respiratory equipment.

#### Thermal Hazards:

Do not expose to temperatures exceeding 50° c.

#### Environmental exposure controls:

None

#### Appropriate engineering controls:

None

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	Spray can	--	--
Odour:	of solvent	--	--
Odour threshold:	Not Relevant	--	--
pH:	Not Relevant	--	--
Melting point / freezing point:	<-20°C fase liquida	--	--
Initial boiling point and boiling range:	>200°C fase liquida	--	--
Flash point:	< 0 ° C	--	--
Evaporation rate:	Not Relevant	--	--
Solid/gas flammability:	Not Relevant	--	--
Upper/lower flammability or explosive limits:	Not Relevant	--	--
Vapour pressure:	4 bar +/-	--	--
Vapour density:	>2	--	--
Relative density:	0.790 kg/l +/-	--	--

	0.05		
Solubility in water:	undissolvable	--	--
Solubility in oil:	complete	--	--
Partition coefficient (n-octanol/water):	Not Relevant	--	--
Auto-ignition temperature:	400° C gas	--	--
Decomposition temperature:	Not Relevant	--	--
Viscosity:	Not Relevant	--	--
Explosive properties:	sezione 10.3	--	--
Oxidizing properties:	Not Relevant	--	--

## 9.2. Other information

Properties	Value	Method:	Notes:
kinematic viscosity:	kv > 20,5	--	--
Miscibility:	Not Relevant	--	--
Fat Solubility:	completa	--	--
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

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

strong acids and flammable liquids

### 10.6. Hazardous decomposition products

the product is flammable, following combustion can lead to the formation of dangerous decomposition products

gas can be formed by thermal decomposition of hydrogen chloride, phosgene, chlorine

by thermal decomposition can rid COx

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Toxicological information of the product:

MULTINET SPRAY

#### 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  
The product is classified: STOT SE 3 H336
- 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:  
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics - CAS: 64742-48-9
- a) acute toxicity:  
Test: LC50 - Route: Inhalation - Species: Rat > 4951 mg/m<sup>3</sup>  
Test: LD50 - Route: Oral - Species: Rat > 15000 mg/kg  
Test: LD50 - Route: Skin - Species: Rabbit > 3160 mg/kg  
Test: NOAEL - Route: Oral - Species: Rat > 30000 Ppm
- g) reproductive toxicity:  
Test: NOAEL - Species: Rat > 5220 mg/m<sup>3</sup>

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## SECTION 12: Ecological information

- 12.1. Toxicity  
Adopt good working practices, so that the product is not released into the environment.  
MULTINET SPRAY  
Not classified for environmental hazards  
Based on available data, the classification criteria are not met  
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics - CAS: 64742-48-9
- a) Aquatic acute toxicity:  
Endpoint: LC50 - Species: Fish > 1000 mg/l - Duration h: 24  
Endpoint: EC50 - Species: Daphnia > 1000 mg/l - Duration h: 24  
Endpoint: EC50 - Species: Algae > 1000 mg/l - Duration h: 72
- 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

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## 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.

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## SECTION 14: Transport information

### 14.1. UN number

ADR-UN number: 1950

IATA-Un number: 1950

IMDG-Un number: 1950

### 14.2. UN proper shipping name

### 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

### 14.5. Environmental hazards

Marine pollutant: No

### 14.6. Special precautions for user

IMDG-Page: 2102

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

No

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## 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)

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)

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:

H226 Flammable liquid and vapour.  
H336 May cause drowsiness or dizziness.  
H304 May be fatal if swallowed and enters airways.  
EUH066 Repeated exposure may cause skin dryness or cracking.  
H220 Extremely flammable gas.  
H280 Contains gas under pressure; may explode if heated.

Hazard class and hazard category	Code	Description
Flam. Gas 1	2.2/1	Flammable gas, Category 1
Aerosols 1	2.3/1	Aerosol, Category 1
Press. Gas	2.5	Gases under pressure
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Asp. Tox. 1	3.10/1	Aspiration hazard, Category 1
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 7: Handling and storage  
SECTION 8: Exposure controls/personal protection  
SECTION 9: Physical and chemical properties  
SECTION 11: Toxicological information  
SECTION 12: Ecological information  
SECTION 15: Regulatory information  
SECTION 16: Other information

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
STOT SE 3, H336	Calculation method

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.