

Safety Data Sheet dated 10/01/2024, version 5

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

1.1. Product identifier

Mixture identification:

Trade name: BIO DETERGENT - BOV

Trade code: 11.638 – 11.639

UFI: KF90-M0XV-T00Y-EWGP

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

Recommended use:

Air conditioner cleaners

Uses advised against:

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)

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

Criteria EC Regulation 1272/2008 (CLP):

 Attention, Skin Irrit. 2, Causes skin irritation.

 Attention, Eye Irrit. 2, Causes severe eye irritation.

Physicochemical effects harmful to human health and the environment:

No other hazards

2.2. Label Elements

Hazard pictograms:



Attention

Hazard statements:

H315 Causes skin irritation.

H319 Causes severe eye irritation.

Precautionary statements:

P264 Wash hands thoroughly after use.
 P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...
 P302+P352 IF ON SKIN: Wash thoroughly with water.
 P305+P351+P338 IN CASE OF EYE CONTACT: Rinse thoroughly for several minutes. Remove any contact lenses if it is easy to do so. Continue rinsing.
 P337+P313 If eye irritation persists, seek medical attention.

Disposizioni speciali:

Nessuna

Special Provisions:

None

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

None

Product contents: Anionic surfactant, Cationic surfactant

The product also contains:

Allergens:

Preservatives: BENZALKONIUM CHLORIDE

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$

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
$\geq 1\%$ - $< 3\%$	Acido benzensolfonico, 4-C10-13-sec-alchil derivati.	CAS: 85536-14-7 EC: 287-494-3 REACH No.: 01- 2119490234- 40-XXXX	 3.1/4/Oral Acute Tox. 4 H302  3.2/1C Skin Corr. 1C H314 4.1/C3 Aquatic Chronic 3 H412
900 ppm	Composti di ammonio quaternario, benzil- C12-16-alchildimetile, cloruri	CAS: 68424-85-1 EC: 270-325-2	 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

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.



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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 ophthalmologist immediately.

Protect uninjured eye.

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:

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

Burning produces heavy smoke.

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

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.

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

For cleaning up:

Wash with plenty of water.

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.
General recommendations on occupational hygiene:
Do not eat or drink while working.
- 7.2. Conditions for safe storage, including any incompatibilities
Store only in the original container away from direct sunlight
Avoid contact with skin and eyes, inhalation of vapours/mists/dusts.
Store at temperatures below 50 °C. Keep away from open flames and heat sources. Avoid direct exposure to the sun.
Keep away from food, drink and feed.
Incompatible Materials:
None in particular.
Indication for the premises:
None in particular.
- 7.3. Specific end use(s)
None in particular

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
No occupational exposure limit available
DNEL Exposure Limit Values
Acido benzensolfonico, 4-C10-13-sec-alcil derivati. - CAS: 85536-14-7
Worker Professional: 19.6 mg/m³ - Consumer: 3.48 mg/m³ - Exposure: Human
Inhalation - Frequency: Long Term, systemic effects
Worker Professional: 187 mg/kg/d - Consumer: 66.7 mg/kg/d - Exposure: Human
Dermal - Frequency: Long Term, systemic effects
Consumer: 1.33 mg/kg/d - Exposure: Human Oral - Frequency: Long Term, systemic effects
PNEC Exposure Limit Values
Acido benzensolfonico, 4-C10-13-sec-alcil derivati. - CAS: 85536-14-7
Target: Fresh Water - Value: 0.003 mg/l
Target: Marine water - Value: 0 mg/l
Target: Microorganisms in sewage treatments - Value: 0.2 mg/l
Target: Freshwater sediments - Value: 0.089 mg/kg
Target: Marine water sediments - Value: 0.009 mg/kg
- 8.2. Exposure controls
Eye protection:
Use close fitting safety goggles, don't use eye lens.
Protection for skin:
Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.
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
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:	Colourless	--	--
Odour:	odorless	--	--
Melting point/freezing point:	0°C	--	--
Boiling point or initial boiling point and boiling range:	>90°C	--	--
Flammability:	Non-flammable	--	--
Lower and upper explosion limit:	Not applicable	--	The product has no flammable or explosive properties
Flash point:	>60 °C	--	--
Auto-ignition temperature:	Not applicable	--	The product has no flammable or explosive properties
Decomposition temperature:	Not Relevant	--	Not relevant for product characterization
pH:	6.5	--	--
Kinematic viscosity:	Not Relevant	--	Not relevant for product characterization
Solubility in water:	complete	--	--
Solubility in oil:	insoluble	--	--
Partition coefficient n-octanol/water (log value):	Not Relevant	--	Not relevant for product characterization
Vapour pressure:	Not Relevant	--	Not relevant for product characterization
Density and/or relative density:	1.00 +/- 0.05 KG/L	--	--
Relative vapour density:	Not Relevant	--	Not relevant for product characterization
Particle characteristics:			
Particle size:	Not Relevant	--	Not relevant for product characterization

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

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

heat, flames and sparks. exposure to light and humidity
 avoid exposing the product to high temperatures



- avoid the accumulation of electrostatic charges.
- 10.5. Incompatible materials
None in particular.
- 10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

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

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

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:

Acido benzensolfonico, 4-C10-13-sec-alchil derivati. - CAS: 85536-14-7

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg - Notes: OECD 401

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

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



Acido benzensolfonico, 4-C10-13-sec-alchil derivati. - CAS: 85536-14-7

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 0.423 mg/l - Duration h: 96 - Notes: OECD 203

Endpoint: EC50 - Species: Daphnia 0.125 mg/l - Duration h: 48 - Notes: OECD 202

Endpoint: EC50 - Species: Algae 0.044 mg/l - Duration h: 72 - Notes: OECS 201

b) Aquatic chronic toxicity:

Endpoint: NOEL - Species: Fish 0.251 mg/l - Duration h: 672 - Notes: QSAR

Endpoint: NOEL - Species: Daphnia 0.054 mg/l - Duration h: 504 - Notes: QSAR

12.2. Persistence and degradability

None

Acido benzensolfonico, 4-C10-13-sec-alchil derivati. - CAS: 85536-14-7

Biodegradability: Readily biodegradable - Duration: 28d - %: 95

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 $\geq 0.1\%$

12.7. 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.

CER 160504

SECTION 14: Transport information

The product is packaged as a BOV (bag on valve) aerosol in which the liquid is segregated from the propellant. Therefore, this SDS has been drawn up considering only the liquid phase, which constitutes the properly identified product. However, for the legislation concerning the transport of dangerous goods, the presence of the propellant is more relevant, even if physically separated from the liquid, and this determines the ADR classification of the product.

14.1. UN number or ID number

Not classified as dangerous in the meaning of transport regulations.

ADR-UN number: 1002

IATA-Un number: 1002

IMDG-Un number: 1002

14.2. UN proper shipping name

ADR-Shipping Name: ARIA COMPRESSA

IATA-Technical Name: COMPRESSED AIR

IMDG-Technical Name: COMPRESSED AIR

14.3. Transport hazard class(es)

ADR-Class: 2

IATA-Class: 2



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- IMDG-Class: 2
- 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
Technical designation IMDG: COMPRESSED AIR
- 14.7. Maritime transport in bulk according to IMO instruments
Product is not 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
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:
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.



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H412 Harmful to aquatic life with long lasting effects.
H318 Causes serious eye damage.
H410 Very toxic to aquatic life with long lasting effects.
H400 Very toxic to aquatic life.

Hazard class and hazard category	Code	Description
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Corr. 1C	3.2/1C	Skin corrosion, Category 1C
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
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Paragraphs modified from the previous revision:

SECTION 1: Identification of the substance/mixture and the company/undertaking
SECTION 2: Hazard Identification
SECTION 3: Composition/Ingredient Information
SECTION 4: First Aid Measures
SECTION 7: Handling and Storage
SECTION 8: Exposure/Personal Protection Controls
SECTION 11: Toxicological information
SECTION 12: Ecological 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
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	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



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	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.