SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

CLEAMEN GASTRO PROFESSIONAL Neutral industrial dishwashing

Date of issue: **11. 06. 2024** Version: **1.0**

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

1.1. Product identifier

Product Name

CLEAMEN GASTRO PROFESSIONAL Neutral industrial dishwashing

UFI code

UFI: RKT0-N06P-J00N-XRTQ

Product code

Not given.

Mixture description

An aqueous solution.

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

Identified uses

A liquid neutral rinsing and polishing product for professional dishwashers.
Professional use.

Uses advised against

Not known. It is recommended to use it only for the intended use. Other uses may expose users to unpredictable risks.

1.3. Details of the supplier of the safety data sheet

CORMEN s.r.o.
Věchnov 73
593 01
Czech Republic
Tel.: +420 566 550 961
Fax: +420 566 551 822
e-mail address for a competent person responsible for the SDS: info@cormen.cz

1.4. Emergency telephone number

112 (General emergency phone).

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture **is classified as hazardous** according to regulation 1272/2008/EC.

Classification according to 1272/2008/EC

Eye Dam. 1; H318

Full text of classifications and H-phrases: see section 16.

The most important adverse physical, human health and environmental effects

Causes serious eye damage.

2.2. Label elements

Hazard pictograms

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Signal word

Danger.

Substances of the mixture to be placed on the label

Contains Undecanol, branched and linear, ethoxylated, propoxylated (≥ 2.5 moles EO/PO).

Hazard statements

H318	Causes serious eye damage.

Precautionary statements

P280	Wear eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P501	Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. After cleaning, dispose of the packaging without residual product content in the sorted waste.

Supplemental hazard information

EUH208 - Contains Benzyl alcohol. May produce an allergic reaction.

Composition according to regulation 648/2004/EC on detergents: ≥ 15 - < 30% non-ionic surfactants, < 5% preservation agents (BENZYL ALCOHOL, 2-BROMO-2-NITROPROPANE-1,3-DIOL, IODOPROPYNYL BUTYLCARBAMATE).

2.3. Other hazards

Mixture does not contain substance(s) meeting the criteria for persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) in accordance with Annex XIII of REACH regulation. The mixture and its substances are not mentioned on the Candidate list for possible inclusion in Annex XIV of REACH at the date of the revision of the safety data sheet (established in accordance with Article 59(1) of REACH regulation., Mixture does not contain the substance(s) identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

3.2.1. Substances of a mixture classified as hazardous

Identification of substance		Content wt. %	Classification according to 1272/2008/EC
Undecanol, branched and linear, ethoxylated, propoxylated (≥ 2.5 moles EO/PO)			
CAS Number	not given	10 - < 20	Acute Tox. 4; H302 Eye Dam. 1; H318
EC Number	940-634-3		
Index Number	not given		
Registration Number	is not subject to registration, it is a polymer		
Benzyl alcohol			
CAS Number	100-51-6	0.1 - < 1	Acute Tox. 4; H302 Skin Sens. 1B; H317 Eye Irrit. 2; H319 ATE_{oral} = 1 200 mg/kg bw
EC Number	202-859-9		
Index Number	603-057-00-5		
Registration Number	01-2119492630-38		
Bronopol (INN); 2-Bromo-2-nitropropane-1,3-diol			
CAS Number	52-51-7	≤ 0.02	Acute Tox. 3; H301 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Dam. 1; H318 Acute Tox. 3; H331 STOT SE 3; H335 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M=100 M(Chronic)=10
EC Number	200-143-0		
Index Number	603-085-00-8		
Registration Number	01-2119980938-15-XXXX		
3-Iodo-2-propynyl butylcarbamate; 3-Iodoprop-2-yn-1-yl butylcarbamate			
CAS Number	55406-53-6	≤ 0.01	Acute Tox. 4; H302 Skin Sens. 1; H317 Eye Dam. 1; H318 Acute Tox. 3; H331 STOT RE 1; H372 (larynx) (inhalation) Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M=10 M(Chronic)=1
EC Number	259-627-5		
Index Number	616-212-00-7		
Registration Number	01-2120762115-60-XXXX		

Full text of classifications and H-phrases: see section 16.

SECTION 4: First aid measures

In all cases keep the victim at physical and mental rest and warm. In case of doubt or if symptoms persist, seek medical attention. Never give anything by mouth if victim is rapidly losing consciousness, unconscious or convulsing. Protect yourself during rescue work.

4.1. Description of first aid measures

Inhalation

Interrupt the exposure, move the person to the fresh air. In case of persistent nausea, seek medical advice.

Skin contact

Remove contaminated clothing, shoes, and wash affected skin thoroughly with water (preferably lukewarm) and soap. Do not use solvents or thinners. If the problem persists, seek medical advice.

Eye contact

Rinse with a gentle stream of water for at least 15 minutes. Keep your eyelids wide open with your thumb and forefinger. If the affected person is wearing contact lenses, remove them before rinsing eyes if it is easy. Seek medical advice.

Ingestion

Rinse your mouth and then drink plenty of water. Do not induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

Are not known.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Small fire:

Carbon dioxide CO_2, dry extinguishing agent, sand or earth, alcohol-resistant foam.

Extensive fire:

Fragmented water streams (water mist), alcohol-resistant foam.

Unsuitable extinguishing media

Solid streams of water may be ineffective.

5.2. Special hazards arising from the substance or mixture

In case of fire extinguishing prevent leakage of water and rest of product into drains. Collect them separately and dispose of safely in accordance with current legislation and applicable local regulations.

In case of fires, hazardous combustion gases are formed: carbon oxides, nitrogen oxides, ammonia, bromine oxides, hydrogen bromide, iodine oxides, hydrogen iodide and products of incomplete combustion.

5.3. Advice for firefighters

Stop further leakage of product if possible. Spilled product, which does not burn, cover with sand or foam. Move containers and barrels away from the fire to a safe place, if possible. Cool all affected containers down with flooding quantities of water. If the fire can´t be extinguished - evacuate the premises.

In case of fire, wear suitable respiratory protective equipment and fire-fighting suit.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes, use suitable protective equipment and clothing, see Section 8. Ensure adequate ventilation. Avoid formation of vapour and aerosol. At the point of leakage, prevent the movement of unauthorized persons.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. If this cannot be avoided, inform the competent authorities (police and firefighters) immediately.

6.3. Methods and material for containment and cleaning up

According to the amount of spilled liquid, drain away the substance (large spillage) or in case of small spillage, absorb it with suitable absorbent (vermiculite, dry sand), put into labelled closed containers and dispose of them accordingly to Section 13. Flush residues with water and collect it for waste disposal. Do not use solvents or dispersants unless instructed by an expert or government authority.

If container is damaged, remove the content to the new undamaged container and label it properly again.

6.4. Reference to other sections

Refer also to the provisions of sections 7, 8 and 13 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes. Personal protection see. Section 8. Ensure good ventilation to prevent formation of vapor and aerosol.

Smoking, eating and drinking should be prohibited at the place of use. Keep safety regulations for handling chemicals. Take off contaminated clothing and protective equipment before entering the dining area. Do not use dirty clothing. After work wash yourself carefully with warm water and soap, take a shower. Use protective cream.

7.2. Conditions for safe storage, including any incompatibilities

Store in original, tightly closed containers, in a dry, cool and well-ventilated place at room temperature.

Protect from frost.

Do not store together with incompatible materials (see subsection 10.5), food, drink and feed.

7.3. Specific end use(s)

See subsection 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Exposure limit value

Not determined in EU.

8.1.2. Biological limit values

Not determined in EU.

8.1.3. DNEL and PNEC values

Benzyl alcohol CAS: 100-51-6

DNEL

Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	22 mg/m^3
Workers	Inhalation	Systemic effect	Acute/short term	110 mg/m^3
Workers	Dermal	Systemic effect	Long term	8 mg/kg/day
Workers	Dermal	Systemic effect	Acute/short term	40 mg/kg/day
General population	Inhalation	Systemic effect	Long term	5.4 mg/m^3

General population	Inhalation	Systemic effect	Acute/short term	27 mg/m^3
General population	Dermal	Systemic effect	Long term	4 mg/kg/day
General population	Dermal	Systemic effect	Acute/short term	20 mg/kg/day
General population	Oral	Systemic effect	Long term	4 mg/kg/day
General population	Oral	Systemic effect	Acute/short term	20 mg/kg/day

PNEC

Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
		Fresh water	Marine water	
1 mg/l	0.1 mg/l	2.3 mg/l	not given	39 mg/l

PNEC

Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
5.27 mg/kg	0.527 mg/kg	no effect	0.456 mg/kg	no effect

Bronopol CAS: 52-51-7

DNEL

Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	3.5 mg/m^3
Workers	Inhalation	Systemic effect	Acute/short term	10.5 mg/m^3
Workers	Inhalation	Local effect	Long term	2.5 mg/m^3
Workers	Inhalation	Local effect	Acute/short term	2.5 mg/m^3
Workers	Dermal	Systemic effect	Long term	2 mg/kg/day
Workers	Dermal	Systemic effect	Acute/short term	6 mg/kg/day
Workers	Dermal	Local effect	Long term	8 µg/cm^2
Workers	Dermal	Local effect	Acute/short term	8 µg/cm^2
General population	Inhalation	Systemic effect	Long term	0.6 mg/m^3
General population	Inhalation	Systemic effect	Acute/short term	1.8 mg/m^3
General population	Inhalation	Local effect	Long term	0.6 mg/m^3
General population	Inhalation	Local effect	Acute/short term	0.6 mg/m^3
General population	Dermal	Systemic effect	Long term	0.7 mg/kg/day
General population	Dermal	Systemic effect	Acute/short term	2.1 mg/kg/day
General population	Dermal	Local effect	Long term	4 µg/cm^2
General population	Dermal	Local effect	Acute/short term	4 µg/cm^2
General population	Oral	Systemic effect	Long term	0.18 mg/kg/day
General population	Oral	Systemic effect	Acute/short term	0.5 mg/kg/day

PNEC

Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
		Fresh water	Marine water	

0 mg/l	0.001 mg/l	0 mg/l	not given	0.43 mg/l

PNEC

Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
0.008 mg/kg	0.009 mg/kg	no effect	0.21 mg/kg	no effect

3-Iodo-2-propynyl butylcarbamate CAS: 55406-53-6

DNEL

Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	0.023 mg/m^3
Workers	Inhalation	Systemic effect	Acute/short term	0.07 mg/m^3
Workers	Inhalation	Local effect	Long term	1.16 mg/m^3
Workers	Inhalation	Local effect	Acute/short term	1.16 mg/m^3
Workers	Dermal	Systemic effect	Long term	2 mg/kg/day

PNEC

Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
		Fresh water	Marine water	
0 mg/l	0 mg/l	0.001 mg/l	0.001 mg/l	0.44 mg/l

PNEC

Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
0.017 mg/kg	0.002 mg/kg	no effect	0.005 mg/kg	no effect

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Use only in well-ventilated areas.

Observe usual safety precautions for working with chemicals. The degree of effectiveness of personal protective equipment depends on temperature and ventilation levels.

8.2.2. Individual protection measures, such as personal protective equipment

Do not eat, drink or smoke. After work, wash thoroughly with warm water and soap and take a shower. Use protective cream. Do not soiled protective equipment to wash, do not use solvents.

Eye/face protection

Wear safety glasses or face shield (EN 166, EN 149+A1).

Skin protection - hand protection

Wear protective gloves when manufacturing and handling the product (EN 374-1, EN 374-2).

The selection of the glove material on consideration of the breakthrough time, permeability, degradation and next relevant factors; other chemicals that may come into contact, physical requirements (cut and puncture protection, dexterity, thermal protection), possible body reactions to the glove material and the glove supplier's instructions and specifications. In case of repeated use of gloves, clean and keep them in a well-ventilated place before taking off.

Skin protection - other

Suitable protective working clothing and protective footwear.

Respiratory protection

Not necessary in case of compliance concentration limits (if they were exceeded, use respiratory protection). In the event of an accident or a fire use self-contained breathing apparatus.

Thermal hazards

In normal use is not necessarily protective equipment to be worn for materials that represent a thermal hazard.

8.2.3. Environmental exposure controls

Uncontrolled release of the mixture into environment is to be avoided. Keep the emission limits according to national legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Mixture

Physical state	Liquid.
Colour	Colourless.
Odour	Not determined.
Melting point/freezing point	Not determined.
Boiling point or initial boiling point and boiling range	Not determined.
Flammability	Not determined.
Lower explosion limit	Not determined.
Upper explosion limit	Not determined.
Flash point	Not determined.
Auto-ignition temperature	Not determined.
Decomposition temperature	Not determined, the mixture does not contain self-reactive substances or organic peroxides or other substances which may decompose.
pH	6.5 - 7.0.
Kinematic viscosity	Not determined, the mixture does not contain a substance classified as aspiration toxic, or the sum of the concentrations of substances classified as aspiration toxic is less than 10 wt. %.
Solubility	Fully miscible.
Partition coefficient n-octanol/water (log value)	Does not apply to mixture.
Vapour pressure	Not determined.
Density and/or relative density	D_4^{20} = 0.9981.
Relative vapour density	Not determined.
Particle characteristics	Does not apply to liquid.

Benzyl alcohol CAS: 100-51-6

Physical state	Liquid.

Colour	Not determined.
Odour	Not determined.
Melting point/freezing point	-15.4 °C (literature).
Boiling point or initial boiling point and boiling range	205.31 °C (literature).
Flammability	The substance is not classified as flammable, pyrophoric or emit flammable gases under standard conditions.
Lower explosion limit	Not determined.
Upper explosion limit	Not determined.
Flash point	100.4 °C (literature).
Auto-ignition temperature	436 °C (literature).
Decomposition temperature	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.
pH	Not determined.
Kinematic viscosity	Not determined, it is not a hydrocarbon or a chlorinated hydrocarbon.
Solubility	1 g/25 ml vody (literature).
Partition coefficient n-octanol/water (log value)	log Pow = 1 (20 °C, literature).
Vapour pressure	7 Pa (20 °C, literature).
Density and/or relative density	1.04 g/cm^3 (24 °C, literature).
Relative vapour density	Not determined.
Particle characteristics	Does not apply to liquid.
Bronopol	CAS: 52-51-7
Physical state	Solid.
Colour	White.
Odour	Not determined.
Melting point/freezing point	129 °C (EU method A.1).
Boiling point or initial boiling point and boiling range	Not determined, substance decomposes.
Flammability	The substance is not classified as flammable (EU method A.10).
Lower explosion limit	Does not apply to solid.
Upper explosion limit	Does not apply to solid.
Flash point	Does not apply to solid.
Auto-ignition temperature	Does not apply to solid.
Decomposition temperature	ca. 170 °C (EU method A.1).
pH	Not determined.
Kinematic viscosity	Does not apply to solid.

Solubility	268 g/l (20.2 °C, pH = 5, EU method A.6). 286 g/l (20.2 °C, pH = 7, EU method A.6). 298 g/l (20.2 °C, pH = 9, EU method A.6).
Partition coefficient n-octanol/water (log value)	log Pow = 0.21 (24 °C, pH = 5, EU method A.8). log Pow = 0.22 (24 °C, pH = 7, EU method A.8). log Pow = -0.34 (24 °C, pH = 9, EU method A.8).
Vapour pressure	72 mN/m (20 °C, concentration 1 g/l, EU method A.5).
Density and/or relative density	D_4^{20} = 1.9 (OECD 109).
Relative vapour density	Does not apply to solid.
Particle characteristics	D50 = 0.25 mm, distribution 3 % (sieving method). D50 = 0.18 mm, distribution 1 % (sieving method).

3-Iodo-2-propynyl butylcarbamate	CAS: 55406-53-6
Physical state	Solid.
Colour	Slight yellowish.
Odour	Faint.
Melting point/freezing point	> 64.72 - < 66.34 °C (OECD 102).
Boiling point or initial boiling point and boiling range	Not determined, substance decomposes.
Flammability	The substance is not classified as flammable (EU method A.10).
Lower explosion limit	Does not apply to solid.
Upper explosion limit	Does not apply to solid.
Flash point	Does not apply to solid.
Auto-ignition temperature	Does not apply to solid.
Decomposition temperature	85 °C (OECD 103).
pH	Not determined.
Kinematic viscosity	Does not apply to solid.
Solubility	182 mg/l (20 °C, pH = 4, OECD 105). 168 mg/l (20 °C, pH = 7, OECD 105). 176 mg/l (20 °C, pH = 9, OECD 105).
Partition coefficient n-octanol/water (log value)	log Pow = 2.81 (25 °C, OECD 107).
Vapour pressure	0 hPa (20 - 25 °C, OECD 104).
Density and/or relative density	D_4^{20} = 1.767 (literature).
Relative vapour density	Does not apply to solid.
Particle characteristics	Not determined.

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Mixture

The mixture does not contain substances classified as hazardous to the physical classes, or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Benzyl alcohol CAS: 100-51-6

Explosives

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive properties.

Flammable gases

It is not gas.

Aerosols

It is not aerosol.

Oxidising gases

It is not gas.

Gases under pressure

It is not gas.

Flammable liquids

The substance is not classified as flammable liquid according to the value of the flash point and boiling point.

Flammable solids

It is not solid.

Self-reactive substances and mixtures

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive or self-reactive properties.

Pyrophoric liquids

Data for the substance are not available.

The substance is stable in air, there is no spontaneous ignition.

Pyrophoric solids

It is not solid.

Self-heating substances and mixtures

Data for the substance are not available.

The substance is not classified as self-heating.

Substances and mixtures, which emit flammable gases in contact with water

Data for the substance are not available.

The chemical structure of the substance does not contain metals or metalloids.

The substance is miscible with water and forms a stable mixture with it.

Oxidising liquids

Data for the substance are not available.

It is an organic substance that does not contain oxygen, fluorine or chlorine, or these elements are chemically bounded only to carbon or hydrogen.

Oxidizing solids

It is not solid.

Organic peroxides
Data for the substance are not available. The substance does not contain a bivalent group -O-O- with at least one organic radical.
Corrosive to metals
Data for the substance are not available. The substance is not classified as corrosive to metal.
Desensitised explosives
Data for the substance are not available. The substance does not contain chemical groups associated with explosive properties.
Bronopol CAS: 52-51-7
Explosives
The substance contains chemical groups associated with explosive properties. Calculated oxygen balance = - 40. The substance is not classified as explosive of division 1.1 (EU method A.14).
Flammable gases
It is not gas.
Aerosols
It is not aerosol.
Oxidising gases
It is not gas.
Gases under pressure
It is not gas.
Flammable liquids
It is not liquid.
Flammable solids
It is not solid.
Self-reactive substances and mixtures
Data for the substance are not available. The substance is not classified as self-reactive.
Pyrophoric liquids
It is not liquid.
Pyrophoric solids
Data for the substance are not available. The substance is stable in air, there is no spontaneous ignition.
Self-heating substances and mixtures
Data for the substance are not available. The substance is not classified as self-heating.
Substances and mixtures, which emit flammable gases in contact with water

Data for the substance are not available.
The chemical structure of the substance does not contain metals or metalloids.
The substance is soluble in water and forms a stable mixture with it.

Oxidising liquids

It is not liquid.

Oxidizing solids

The substance is not classified as oxidizing solid (EU method A.17).

Organic peroxides

Data for the substance are not available.
The substance does not contain a bivalent group -O-O- with at least one organic radical.

Corrosive to metals

Data for the substance are not available.
The substance is not classified as corrosive to metal.

Desensitised explosives

Data for the substance are not available.
The substance does not contain chemical groups associated with explosive properties.

3-Iodo-2-propynyl butylcarbamate CAS: 55406-53-6

Explosives

Data for the substance are not available.
The substance does not contain chemical groups associated with explosive properties.

Flammable gases

It is not gas.

Aerosols

It is not aerosol.

Oxidising gases

It is not gas.

Gases under pressure

It is not gas.

Flammable liquids

It is not liquid.

Flammable solids

It is not solid.

Self-reactive substances and mixtures

Data for the substance are not available.
The substance is not classified as self-reactive.

Pyrophoric liquids

It is not liquid.

Pyrophoric solids

Data for the substance are not available.
The substance is stable in air, there is no spontaneous ignition.

Self-heating substances and mixtures

Data for the substance are not available.
The substance is not classified as self-heating.

Substances and mixtures, which emit flammable gases in contact with water

Data for the substance are not available.
The chemical structure of the substance does not contain metals or metalloids.
The substance is soluble in water and forms a stable mixture with it.

Oxidising liquids

Data for the substance are not available.
It is an organic substance that does not contain oxygen, fluorine or chlorine, or these elements are chemically bounded only to carbon or hydrogen.

Oxidizing solids

It is not solid.

Organic peroxides

Data for the substance are not available.
The substance does not contain a bivalent group -O-O- with at least one organic radical.

Corrosive to metals

Data for the substance are not available.
The substance is not classified as corrosive to metal.

Desensitised explosives

Data for the substance are not available.
The substance does not contain chemical groups associated with explosive properties.

9.2.2. Other safety characteristics

Mechanical sensitivity	Not determined, it is not an explosive substance.
Self-accelerating polymerisation temperature	Not determined, it is not a polymerising substance.
Formation of explosible dust/air mixtures	Not determined, it is not a dust.
Acid/alkaline reserve	Not determined, pH is in the range 4 - 10.
Evaporation rate	Not determined.
Miscibility	Not determined.
Conductivity	Not determined.
Corrosiveness	Not determined.
Gas group	Not determined, it is not gas.
Redox potential	Not determined.
Radical formation potential	Not determined.
Photocatalytic properties	Not determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

The mixture is stable under normal conditions of use. There aren´t any hazardous reaction.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions aren´t known under normal conditions of use.

10.4. Conditions to avoid

Protect from temperatures below 0 °C.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Burning releases carbon oxides, nitrogen oxides, ammonia, bromine oxides, hydrogen bromide, iodine oxides, hydrogen iodide and products of incomplete combustion.

SECTION 11: Toxicological information

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

Mixture

Acute toxicity

The mixture is not classified as toxic for all routes of exposure.

Oral Data for the mixture are not available.
The mixture is not classified by the additive formula.
$ATE_{mixture}$ > 2 500 mg/kg.

Dermal Data for the mixture are not available.
$ATE_{mixture}$ > 5 000 mg/kg (estimate, low concentration of substance classified as toxic dermal route of exposure).

Inhalation Data for the mixture are not available.
$ATE_{mixture}$ > 20 mg/kg (estimate, low concentration of substances classified as toxic inhalation route of exposure).

Skin corrosion/irritation

Data for the mixture are not available.
The mixture is not classified as skin irritant based on the general/specific concentration limits of substance(s).

Serious eye damage/irritation

Data for the mixture are not available.
The mixture is classified as causes serious eye damage based on the general/specific concentration limits of substance(s).

Respiratory or skin sensitisation

Data for the mixture are not available.
The mixture is not classified as a skin sensitizing according to the general/specific concentration limits of substance(s).
EUH208 - Contains Benzyl alcohol. May produce an allergic reaction.

Germ cell mutagenicity

Data for the mixture are not available.

The mixture does not contain substances classified as mutagenicity or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Carcinogenicity

Data for the mixture are not available.

The mixture does not contain substances classified as carcinogenicity or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Reproductive toxicity

Data for the mixture are not available.

The mixture does not contain substances classified as toxic for reproduction or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

STOT – single exposure

Data for the mixture are not available.

The mixture is not classified as toxic for specific target organs in a single exposure in category 3 according to the recommended concentration limits of substance(s).

STOT – repeated exposure

Data for the mixture are not available.

The mixture is not classified as toxic for specific target organs in a repeated exposure according to the general/specific concentration limits of substance(s).

Aspiration hazard

Data for the mixture are not available.

The mixture does not contain substances classified as aspiration hazard or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

Other information

See section 2 and 4.

Benzyl alcohol CAS: 100-51-6

Acute toxicity

Oral	The substance is classified in category 4. LD_{50} = 1 620 mg/kg (rat, OECD 401). ATE = 1 200 mg/kg (according to harmonized classification).
Dermal	Data for the substance are not available.
Inhalation	Based on available data, the classification criteria are not met. LC_{50} > 4 178 mg/m³ (aerosol, rat, 4 hrs., no death is observed, OECD 403).

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Mean erythema score = 0; 0; 0.7 (fully reversible after 72 hours) and oedema = 0 (rabbit, 72 hrs., OECD 404).

Serious eye damage/irritation

The substance is classified as eye irritant.

Mean score of corneal opacity = 1 (fully reversible after 21 days), iritis = 0; 0.3; 0 (fully reversible after 48 hours), conjunctival redness = 2 (fully reversible after 21 days), conjunctival oedema = 1; 0.7; 0.7 (fully reversible after 7 days) (rabbit, 72 hrs., OECD 405).

Respiratory or skin sensitisation

The substance is classified as skin sensitising in category 1B (mouse, OECD 429).

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Negative (OECD 471, OECD 473, OECD 487).

Carcinogenicity

Based on available data, the classification criteria are not met.

Under the conditions of these 2-year gavage studies, there was no evidence of carcinogenic activity (rat, oral, OECD 451).

Reproductive toxicity

Based on available data, the classification criteria are not met.

NOAEL > 750 mg/kg/day (rat, oral, generation P0, literature).

NOAEL > 750 mg/kg/day (rat, oral, generation F1, literature).

NOAEL > 750 mg/kg/day (rat, oral, generation F2, literature).

STOT – single exposure

Data for the substance are not available.

STOT – repeated exposure

Based on available data, the classification criteria are not met.

NOAEL = 400 mg/kg/day (rat, oral, 104 weeks, OECD 451).

NOAEC = 1 072 mg/m³ (rat, aerosol, 28 days, OECD 412).

Aspiration hazard

The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm^2/s or less at 40 °C.

Bronopol CAS: 52-51-7

Acute toxicity

Oral	The substance is classified in category 3. LD_{50} = 211 mg/kg (rat, male, OECD 401). LD_{50} = 193 mg/kg (rat, female, OECD 401).
Dermal	The substance is classified in category 4 according to harmonized classification. LD_{50} > 2 000 mg/kg (rat, OECD 402). ATE = 1 100 mg/kg (for calculation by additive formula).

Inhalation The substance is classified in category 3.

LC_{50} ≥ 0.588 mg/l (rat, aerosol, 4 hrs., of the high dose group (0.588 mg/l) one male animal was found dead on the day following exposure; and 2 more animals (one male and one female) were killed for humane reasons because they suffered from inflammation of the eyes. The authors attribute the deaths of 3 animals at this level only to the local irritancy of bronopol. However, symptoms of local irritation only occurred at concentrations causing lethality. Thus, acute inhalation toxicity is the predominant effect. No deaths occurred in the control groups or at concentrations of 0.038 or 0.089 mg/l.).

Skin corrosion/irritation

The substance is classified as skin irritant.

Primary dermal irritation index PDII = 6.2 (not fully reversible after 72 hours) (rabbit, 72 h, OECD 404).

Serious eye damage/irritation

The substance classified as seriously damaging to the eyes.

Mean score of conjunctival redness = 1.6, conjunctival oedema = 1.0 (fully reversible after 7 days, 5% bronopol, rabbit, 72 h).

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

Not skin sensitising (guinea pig, maximization test).

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

In vitro:

Negative (bacterial reverse mutation assay, mammalian cell gene mutation assay).

Positive (mammalian chromosome aberration test).

In vivo:

Negative (OECD 474, OECD 486, rodent dominant lethal assay).

Carcinogenicity

Based on available data, the classification criteria are not met.

NOEL = 7 mg/kg/day (carcinogenity, rat, oral).

Reproductive toxicity

Based on available data, the classification criteria are not met.

NOAEL = 70 mg/kg/day (rat, oral, generation P0, two-generation test).

NOAEL = 200 mg/kg/ day (rat, oral, generation F1, two-generation test).

NOAEL = 200 mg/kg/ day (rat, oral, generation F2, two-generation test).

STOT – single exposure

Data for the substance are not available.

May cause respiratory irritation.

STOT – repeated exposure

Based on available data, the classification criteria are not met.

NOAEL = 7 mg/kg/day (rat, oral, 104 weeks).

LOAEL = 32 mg/kg/day (rat, oral, 104 weeks).

NOAEL = 0.2% acetone solution (mouse, dermal, 80 weeks).

LOAEL = 0.5% acetone solution (mouse, dermal, 80 weeks).

Aspiration hazard

The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm^2/s or less at 40 °C.

3-Iodo-2-propynyl butylcarbamate CAS: 55406-53-6

Acute toxicity

Oral	The substance is classified in category 4. LD_{50} = 1 470 mg/kg (rat, OECD 401).
Dermal	Based on available data, the classification criteria are not met. LD_{50} > 2 000 mg/kg (rabbit, EPA OPP 81-2).
Inhalation	The substance is classified in category 3. LC_{50} = 0.67 mg/l (dust, rat, 4 hrs., OECD 403).

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Primary dermal irritation index PDII = 2.63 (max. 3, fully reversible after 9 days), mean erythema score = 1.44 (fully reversible after 9 days), mean oedema score = 1.06 (fully reversible after 4 days) (rabbit, 72 hrs., EPA OPP 81-5).

Serious eye damage/irritation

The substance is classified as seriously damaging to the eyes.

Mean score of corneal opacity ≥ 2.5 (not fully reversible), iritis ≥ 1 (fully reversible after 14 days), conjunctival redness ≥ 2 (not fully reversible), conjunctival oedema = 4 (not fully reversible) (rabbit, 72 hrs., EPA OPP 81-4).

Respiratory or skin sensitisation

The substance is classified as skin sensitising in category 1 according to harmonized classification.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Negative (OECD 476).

Carcinogenicity

Data for the substance are not available.

Reproductive toxicity

Data for the substance are not available.

STOT – single exposure

Data for the substance are not available.

STOT – repeated exposure

Causes damage to larynx through prolonged or repeated inhalation exposure.

NOAEL = 200 mg/kg/day (dermal irritation, rat, dermal, 90 d., OECD 411).

LOAEL = 500 mg/kg/day (dermal irritation, rat, dermal, 90 d., OECD 411).

NOAEC = 1.16 mg/m^3 (histopathology, rat, dust, 90 d., OECD 413).

LOAEC = 6.7 mg/m^3 (histopathology, rat, dust, 90 d., OECD 413).

Critical effects observed = 0.007 mg/l (larynx, rat, dust, 90 d., OECD 413).

Aspiration hazard

The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm^2/s or less at 40 °C.

11.2. Information on other hazards

Mixture do not contain substance(s) meets meeting the criteria for persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) in accordance with Annex XIII of REACH regulation. The mixture and its substances are not mentioned on the Candidate list for possible inclusion in Annex XIV of REACH at the date of the revision of the safety data sheet and given in the list (established in accordance with Article 59(1) for having endocrine disrupting properties of REACH regulation.

Mixture do not contain the substance(s) identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.There is no other relevant information on adverse health effects that is not required according to the classification criteria set out in CLP Regulation.

SECTION 12: Ecological information

12.1. Toxicity

Mixture

Data for the mixture are not available.

Acute aquatic toxicity

The mixture is not classified as acute aquatic toxicity based on calculation according to the summation method.

category 1	∑ = 2.1

Chronic aquatic toxicity

The mixture is not classified as chronic aquatic toxicity based on calculation according to the summation method.

category	1	2	3	4
∑	0.21	2.1	21	0.21

Benzyl alcohol CAS: 100-51-6

The substance is not classified as hazardous for the aquatic environment.

Fish

LC_{50}, 96 hrs., Oryzias latipes: ≥ 100 mg/l (mortality, OECD 203).

Crustaceans

EC_{50}, 48 hrs., Daphnia Magna: 230 mg/l (mobility, OECD 202).
NOEC, 21 d., Daphnia Magna: 95.3 mg/l (reproduction, OECD 211).

Algae

EC_{50}, 72 hrs., Pseudokirchneriella subcapitata: 759 mg/l (growth rate, OECD 201).
EC_{50}, 72 hrs., Pseudokirchneriella subcapitata: 459 mg/l (biomass, OECD 201).
EC_{10}, 72 hrs., Pseudokirchneriella subcapitata: 556 mg/l (growth rate, OECD 201).
EC_{10}, 72 hrs., Pseudokirchneriella subcapitata: 309 mg/l (biomass, OECD 201).

Bronopol CAS: 52-51-7

The substance is classified as Aquatic Acute 1; H400 (M = 100) and Aquatic Chronic 1; H410 (M=10).

Fish

LC_{50}, 96 hrs., Lepomis macrochirus: 11 mg/l (mortality, OECD 203).
NOEC, 28 d., Oncorhynchus mykiss: 2.61 mg/l (mortality, OECD 215).

Crustaceans

EC_{50}, 48 hrs., Daphnia Magna: 1.4 mg/l (mobility, OECD 202).
NOEC, 21 d., Daphnia Magna: 0.27 mg/l (OECD 211).

Algae

EC_{50}, 72 hrs., Desmodesmus subspicatus: 0.007 mg/l (growth rate, OECD 201).
EC_{10}, 72 hrs., Desmodesmus subspicatus: 0.005 mg/l (growth rate, OECD 201).

3-Iodo-2-propynyl butylcarbamate CAS: 55406-53-6

The substance is classified as Aquatic Acute 1; H400 (M = 10) and Aquatic Chronic 1; H410 (M=1).

Fish

LC_{50}, 96 hrs., Oncorhynchus mykiss: 67 µg/l (mortality, EPA OPP 72-1).
NOEC, 35 d., Pimephales promelas: 8.4 µg/l (mortality, EPA OPP 72-4).

Crustaceans

EC_{50}, 48 hrs., Daphnia Magna: 0.645 mg/l (mortality, EPA OPP 72-2).
NOEC, 21 d., Daphnia Magna: 49.9 µg/l (mortality, EPA OPP 72-4).

Algae

EC_{50}, 72 hrs., Desmodesmus subspicatus: 53 µg/l (growth rate, OECD 201).
EC_{50}, 72 hrs., Desmodesmus subspicatus: 22 µg/l (biomass, OECD 201).
EC_{10}, 72 hrs., Desmodesmus subspicatus: 13 µg/l (growth rate, OECD 201).
EC_{10}, 72 hrs., Desmodesmus subspicatus: 5.8 µg/l (biomass, OECD 201).
NOEC, 72 hrs., Desmodesmus subspicatus: 4.6 µg/l (growth rate, OECD 201).
NOEC, 72 hrs., Desmodesmus subspicatus: 4.6 µg/l (biomass, OECD 201).

12.2. Persistence and degradability

Mixture

Data for the mixture are not available.

Benzyl alcohol CAS: 100-51-6

Readily biodegradable: 92 - 96 % after 14 days (O_2 consumption, OECD 301 C).

Bronopol CAS: 52-51-7

Readily biodegradable: 70 - 80 % after 28 days (CO_2 evolution, OECD 301 B).

3-Iodo-2-propynyl butylcarbamate CAS: 55406-53-6

Not readily biodegradable: 5 % after 28 days (CO_2 evolution, OECD 301 B).

12.3. Bioaccumulative potential

Mixture

Data for the mixture are not available.

Benzyl alcohol CAS: 100-51-6

log Pow = 1 (20 °C, literature).

Bronopol CAS: 52-51-7

log Pow = 0.21 (24 °C, pH = 5, EU method A.8).
log Pow = 0.22 (24 °C, pH = 7, EU method A.8).
log Pow = -0.34 (24 °C, pH = 9, EU method A.8).

3-Iodo-2-propynyl butylcarbamate CAS: 55406-53-6

log Pow = 2.81 (25 °C, OECD 107).

12.4. Mobility in soil

Mixture

Data for the mixture are not available.

Benzyl alcohol CAS: 100-51-6

Data for the substance are not available.

Bronopol CAS: 52-51-7

Koc = 5 (calculation).

3-Iodo-2-propynyl butylcarbamate CAS: 55406-53-6

Koc = 3.9 - 90.1 (according to type of soil, batch equilibrium method).

12.5. Results of PBT and vPvB assessment

Mixture does not contain substance(s) meeting the criteria for persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) in accordance with Annex XIII of REACH Regulation. The mixture and its substances are not mentioned on the Candidate list for possible inclusion in Annex XIV of REACH at the date of the revision of the safety data sheet (established in accordance with Article 59(1) of REACH Regulation.

12.6. Endocrine disrupting properties

The mixture and its substances are not mentioned on the Candidate list for possible inclusion in Annex XIV of REACH at the date of the revision of the safety data sheet (established in accordance with Article 59(1) of REACH Regulation. Mixture does not contain the substance(s) identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods of the substance or mixture and the contaminated packaging

Dispose according to the applicable European and local regulations (eg. in a hazardous waste incinerator). Do not empty unused product into drainage systems. Do not contaminate ponds or ditches with the product or used container. Hand over the residual amounts and solutions to a licensed disposal company.

Hand over the remaining quantities and unregenerate solutions to an authorized person (specialized company with authorization) or to the collection yard in the hazardous waste section according to the worker's instructions. Empty, cleaned packaging can be stored at a landfill of the appropriate category or handed over for recycling.

Possible waste code

16 03 05* - organic wastes containing hazardous substances (mixture), 15 01 10* - packaging containing residues of or contaminated by hazardous substances (contaminated packaging), 15 01 02 - plastic packaging (clear packaging).

Physical/chemical properties that may affect waste treatment options

Not known.

Special precautions recommended for waste management

Not known.

Waste legislation

Directive 2008/98/EC on waste and repealing certain Directives, as amended.

SECTION 14: Transport information

This product is not classified as a dangerous for transportation (ADR/RID, IMDG, ICAO/IATA).

14.1. UN number or ID number

Not given.

14.2. UN proper shipping name

Not given.

14.3. Transport hazard class(es)

Not given.

14.4. Packing group

Not given.

14.5. Environmental hazards

It is not dangerous for the environment during transport.

14.6. Special precautions for user

Not given.

14.7. Maritime transport in bulk according to IMO instruments

Not available.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation No. 1907/2006/EC, concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals, as amended (REACH)

Regulation No. 1272/2008/EC, on Classification, Labelling and Packaging of substances and mixtures, as amended (CLP)

Regulation No. 648/2004/EC on detergents, as amended

15.2. Chemical safety assessment

Has not been carried out for mixture.

SECTION 16: Other information

Reason for the revision of the safety data sheet

Change of the classification and labeling of the mixture. Change in the composition of the mixture in section 3 and related changes in the other sections.

Key or legend to abbreviations and acronyms

Acute Tox. 3	Acute toxicity, cat. 3
Acute Tox. 4	Acute toxicity, cat. 4
Aquatic Acute 1	Acute aquatic hazard, cat. 1
Aquatic Chronic 1	Chronic aquatic hazard, cat. 1
Eye Dam. 1	Serious eye damage, cat. 1
Eye Irrit. 2	Eye irritation, cat. 2
Skin Irrit. 2	Skin irritation, cat. 2
Skin Sens. 1	Skin sensitization, cat. 1
Skin Sens. 1B	Skin sensitization, cat. 1B
STOT RE 1	Specific target organ toxicity - repeated exposure, cat. 1
STOT SE 3	Specific target organ toxicity - single exposure, cat. 3
ATE	Acute Toxicity Estimate
bw	body weight
M	Multiplying factor
ADR	Accord Dangereuses Route
CLP	Regulation No. 1272/2008/EC, on Classification, Labelling and Packaging of substances and mixtures
DNEL	Derived No Effect Level
ICAO/IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
PBT	Persistent, bioaccumulative, toxic substance
PNEC	Predicted No Effect Concentration
REACH	Regulation No. 1907/2006/EC, concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulation concerning the International Carriage of Dangerous Goods by Rail
STOT	Specific target organ toxicity
vPvB	Very persistent and very bioaccumulative substance

Sources of key data used to compile the Safety Data Sheet

European legislation, manufacturer's safety data sheet, registration dossier of substances.

List of H- and P- phrases

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.

H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
P280	Wear eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P501	Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. After cleaning, dispose of the packaging without residual product content in the sorted waste.

Training advice

According to SDS.

Other information

Classification according to data from the manufacturer. The mixture is classified using calculation methods according to Regulation CLP and tests. Use only for the purposes designated by the manufacturer, will prevent health and environmental risks.

The information in this SDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

The safety data sheet is created in accordance with Regulation No. 2020/878/EC. There is no additional information in accordance with the local and national legislation of the Member State in the European Union, in the safety data sheet.

The safety data sheet was created by company LACHEPRA s.r.o.