SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: ORLAV - CREME MAINS BACTERICIDE

Product code: 0425.

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

Hygiene of the hands LIQUID BIOCIDE

1.3. Details of the supplier of the safety data sheet

Registered company name : ITW SPRAYTEC - ITECMA.

Address : 42, rue Gallieni.92600.Asnières sur Seine.FRANCE.

Telephone : +33 (0)1 40 80 32 32. Fax : +33 (0)1 40 80 32 30.

infofds@itwpc.com www.itecma.fr

1.4. Emergency telephone number: +33 (0)1 45 42 59 59.

Association/Organisation: INRS / ORFILA http://www.centres-antipoison.net.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Skin irritation, Category 2 (Skin Irrit. 2, H315).

Eye irritation, Category 2 (Eye Irrit. 2, H319). Hazardous to the aquatic environment - Chronic hazard, Category 3 (Aquatic Chronic 3, H412).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

2.2. Label elements

Biocidal mixture (see section 15).

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms:



GHS07

Signal Word : WARNING

Hazard statements:

H315 Causes skin irritation.
H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements - Prevention:

P273 Avoid release to the environment.

P280 Wear eye protection.

Precautionary statements - Response :

P302 + P352 IF ON SKIN: Wash with plenty of water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P332 + P313 If skin irritation occurs: Get medical advice/attention.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Precautionary statements - Disposal:

P501 Eliminate the contents / bowl in an installation of approved elimination of the waste

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition:

Identification	(EC) 1272/2008	Note	%
INDEX: 0759		[1]	0 <= x % < 2.5
CAS: 56-81-5			
EC: 200-289-5			
REACH: EXEMPTE			
GLYCEROL			
INDEX: 612_131_00_6	GHS06, GHS05, GHS09		$0 \le x \% < 2.5$
CAS: 7173-51-5	Dgr		
EC: 230-525-2	Acute Tox. 3, H301		
	Skin Corr. 1B, H314		
DIDECYLDIMETHYLAMMONIUM	Aquatic Acute 1, H400		
CHLORIDE	M Acute = 10		
	Aquatic Chronic 1, H410		
	M Chronic = 1		
INDEX: 0091	GHS07, GHS05, GHS09		$0 \le x \% < 2.5$
CAS: 68424-85-1	Dgr		
EC: 270-325-2	Acute Tox. 4, H302		
REACH: 01-2119965180-41-XXXX	Skin Corr. 1B, H314		
	Aquatic Acute 1, H400		
QUATERNARY AMMONIUM COMPOUNDS,	M Acute = 10		
BENZYL-C12-16-ALKYLDIMETHYL,	Aquatic Chronic 1, H410		
CHLORIDES	M Chronic = 1		

Information on ingredients:

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation :

Discard the victim of the product and provide fresh air. Consult doctor in case of symptoms.

In the event of splashes or contact with eyes:

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

If an irritation appears or if the contamination is spread or prolonged, to consult a doctor.

In the event of swallowing:

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Seek medical attention immediately, showing the label.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use:

- sprayed water or water mist
- foam
- powder
- carbon dioxide (CO2)

Unsuitable methods of extinction

In the event of a fire, do not use:

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed:

- carbon monoxide (CO)
- carbon dioxide (CO2)

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid any contact with the skin and eyes.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7: HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Fire prevention:

Prevent access by unauthorised personnel.

Recommended equipment and procedures:

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid skin and eye contact with this mixture.

Prohibited equipment and procedures:

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

Stable under normal conditions of handling and storage

Storage

Store in original, tightly closed, protected from light, heat and cold pack.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010):

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
56-81-5	10 mg/m3				

- France (INRS - ED984 :2012) :

CAS	VME-ppm:	VME-mg/m3:	VLE-ppm:	VLE-mg/m3:	Notes:	TMP No:
56-81-5	-	10	_	-	_	_

- UK / WEL (Workplace exposure limits, EH40/2005, 2007):

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
56-81-5	10 mg/m3				

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES (CAS: 68424-85-1)

Final use: Workers.
Exposure method: Dermal contact.

Potential health effects: Long term systemic effects. DNEL: 5.7 mg/kg body weight/day

Exposure method: Inhalation.

Potential health effects: Long term systemic effects.

DNEL: 3.96 mg of substance/m3

Final use: Consumers.

Exposure method: Dermal contact.

Potential health effects: Long term systemic effects.

DNEL: 3.4 mg/kg body weight/day

Exposure method: Inhalation.

Potential health effects: Long term systemic effects.

DNEL: 1.64 mg of substance/m3

Predicted no effect concentration (PNEC):

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES (CAS: 68424-85-1)

Environmental compartment: Soil.
PNEC: 7 mg/kg

 $\begin{array}{ll} \mbox{Environmental compartment:} & \mbox{Fresh water.} \\ \mbox{PNEC:} & \mbox{0.0009 mg/l} \end{array}$

Environmental compartment: Sea water.
PNEC: 0.00009 mg/l

Environmental compartment: Intermittent waste water.

PNEC: 0.00016 mg/l

Environmental compartment: Fresh water sediment.

PNEC: 0.267 mg/kg

Environmental compartment: Marine sediment.

PNEC: 0.0267 mg/kg

Environmental compartment: Waste water treatment plant.

PNEC: 0.4 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE):







Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question: other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Natural latex
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVC (polyvinyl chloride)
- Butyl Rubber (Isobutylene-isoprene copolymer)

Recommended properties:

- Impervious gloves in accordance with standard EN374

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing:

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

In normal use, a breathing protection is not required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information:

Physical state : Viscous liquid.

Aspect : Crystal clear colorless.

Important health, safety and environmental information

pH: 6.50 +/- 0,5.

Neutral.

Boiling point/boiling range: Not relevant.

Flash point interval : Not relevant.

Vapour pressure (50°C) : Not relevant.

Density: = 1,020 g/cm 3 +/-0,02

Water solubility:

Viscosity:

= 600 mPa/s

Melting point/melting range:

Not relevant.

Self-ignition temperature:

Not relevant.

Decomposition point/decomposition range:

Not relevant.

9.2. Other information

No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid:

- frost

10.5. Incompatible materials

Do not mix with other desinfectants.

10.6. Hazardous decomposition products

The thermal decomposition may release/form:

- carbon monoxide (CO)
- carbon dioxide (CO2)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

11.1.1. Substances

Acute toxicity:

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES (CAS: 68424-85-1)

Oral route : LD50 = 795 mg/kg

Species: Rat

DIDECYLDIMETHYLAMMONIUM CHLORIDE (CAS: 7173-51-5)

Oral route : LD50 = 238 mg/kg

Species: Rat

OECD Guideline 401 (Acute Oral Toxicity)

Dermal route : LD50 = 3342 mg/kg

Species : Rabbit

GLYCEROL (CAS: 56-81-5)

Oral route : LD50 = 12600 mg/kg

Species: Rat

 $Dermal \ route: \\ LD50 > 10000 \ mg/kg$

Species: Rabbit

Skin corrosion/skin irritation:

DIDECYLDIMETHYLAMMONIUM CHLORIDE (CAS: 7173-51-5)

Corrosivity: Causes severe skin burns.

Species: Rabbit

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Effect observed: Overall irritation score

Species: Rabbit

Respiratory or skin sensitisation:

DIDECYLDIMETHYLAMMONIUM CHLORIDE (CAS: 7173-51-5)
Buehler Test:
Non-sensitiser.

Buehler Test: Non-sensitiser.

Species: Guinea pig

Other guideline

Germ cell mutagenicity:

DIDECYLDIMETHYLAMMONIUM CHLORIDE (CAS: 7173-51-5)

Mutagenesis (in vivo): Negative.

Species: Rat

OECD Guideline 475 (Mammalian Bone Marrow Chromosome Aberration Test)

OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Ames test (in vitro): Negative.

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES (CAS: 68424-85-1)

No mutagenic effect.

Mutagenesis (in vitro): Negative.

Ames test (in vitro): Negative.

Carcinogenicity:

DIDECYLDIMETHYLAMMONIUM CHLORIDE (CAS: 7173-51-5)

Carcinogenicity Test: Negative.

No carcinogenic effect.

11.1.2. Mixture

No toxicological data available for the mixture.

SECTION 12: ECOLOGICAL INFORMATION

Harmful to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

12.1.1. Substances

DIDECYLDIMETHYLAMMONIUM CHLORIDE (CAS: 7173-51-5)

Fish toxicity : LC50 = 0.19 mg/l

Factor M = 1

Species : Pimephales promelas Duration of exposure : 96 h

NOEC = 0.032 mg/l Species : Danio rerio

Duration of exposure: 35 days

OECD Guideline 210 (Fish, Early-Life Stage Toxicity Test)

Crustacean toxicity: EC50 = 0.062 mg/l

Factor M = 10

Species : Daphnia magna Duration of exposure : 48 h

NOEC = 0.010 mg/l

Factor M = 1

Species : Daphnia magna Duration of exposure : 21 days

OECD Guideline 211 (Daphnia magna Reproduction Test)

Algae toxicity : ECr50 = 0.026 mg/l

Factor M = 10

Species: Pseudokirchnerella subcapitata

Duration of exposure: 96 h

OECD Guideline 201 (Alga, Growth Inhibition Test)

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES (CAS: 68424-85-1)

Fish toxicity: LC50 = 1 mg/l

Factor M = 1

Duration of exposure: 96 h

Crustacean toxicity : EC50 = 0.1 mg/l

Factor M = 10

Species : Daphnia magna Duration of exposure : 48 h

Algae toxicity: ECr50 = 0.1 mg/l

Factor M = 10

Species: Pseudokirchnerella subcapitata

Duration of exposure: 72 h

 $\begin{aligned} NOEC &= 0.01 \ mg/l \\ Factor & M &= 1 \end{aligned}$

Species: Pseudokirchnerella subcapitata

OECD Guideline 201 (Alga, Growth Inhibition Test)

GLYCEROL (CAS: 56-81-5)

Fish toxicity: LC50 = 54000 mg/l

Species : Oncorhynchus mykiss Duration of exposure : 96 h

Crustacean toxicity: EC50 > 10000 mg/l

Species : Daphnia magna Duration of exposure : 24 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES (CAS: 68424-85-1)

Biodegradability: Rapidly degradable.

DIDECYLDIMETHYLAMMONIUM CHLORIDE (CAS: 7173-51-5) Biodegradability: Rapidly degradable.

GLYCEROL (CAS: 56-81-5)

Chemical oxygen demand : DCO = 1.16 g/g

ISO 15705 (Determination of the chemical oxygen demand index (ST-COD) -

Small-scale sealed-tube method)

Five-day biochemical oxygen demand : DBO5 = 0.87 g/g

Biodegradability: Rapidly degradable.

DBO5/DCO = 0.75

12.2.2. Mixtures

Surfactant(s) contained in this preparation complies (comply) with the biodegradability criteria as laid down in Regulation (EC) No 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be at their direct request or at the request of a detergent manufacturer.

12.3. Bioaccumulative potential

12.3.1. Substances

DIDECYLDIMETHYLAMMONIUM CHLORIDE (CAS: 7173-51-5)

Bioaccumulation : BCF = 81

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES (CAS: 68424-85-1)

Octanol/water partition coefficient : $\log \text{Koe} < 3$.

GLYCEROL (CAS: 56-81-5)

Octanol/water partition coefficient : $\log \text{Koe} < 3$.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste:

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14: TRANSPORT INFORMATION

Exempt from transport classification and labelling.

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2015 - IMDG 2014 - ICAO/IATA 2015).

SECTION 15: REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 1297/2014.

- Container information:

No data available.

- Particular provisions:

No data available.

- Labelling for biocidal products (Regulation 1896/2000, 1687/2002, 2032/2003, 1048/2005, 1849/2006, 1451/2007 and Directive 98/8/EC)

NameCAS%Product-typeDIDECYLDIMETHYLAMMONIUM
CHLORIDE7173-51-510,20 g/l01QUATERNARY AMMONIUM COMPOUNDS,
BENZYL-C12-16-ALKYLDIMETHYL,
CHLORIDES68424-85-17,65 g/l01

Product-type 1 : Human hygiene.

15.2. Chemical safety assessment

No data available.

SECTION 16: OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3:

H301 Toxic if swallowed. H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Abbreviations:

DNEL: Derived No-Effect Level

PNEC: Predicted No-Effect Concentration

 $ADR: European \ agreement \ concerning \ the \ international \ carriage \ of \ dangerous \ goods \ by \ Road.$

IMDG : International Maritime Dangerous Goods. IATA : International Air Transport Association. ICAO : International Civil Aviation Organisation

RID: Regulations concerning the International carriage of Dangerous goods by rail.

 $WGK: Wasserge fahrdungsklasse \ (Water \ Hazard \ Class).$

GHS07: Exclamation mark

PBT: Persistent, bioaccumulable and toxic. vPvB: Very persistent, very bioaccumulable. SVHC: Substances of very high concern.