

HUMAN USE INSECT REPELLENT BIOVECTROL HERBAL SPRAY

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Issue date: 3/3/2020 Revision date: 3/3/2020 Supersedes version of: 7/3/2018 Version: 2.1

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

1.1. Product identifier

Product form : Mixture
Trade name : HUMAN USE INSECT REPELLENT BIOVECTROL HERBAL SPRAY
Product code : RELMIB002
Vaporizer : Spray
Packaged product code : REMPBT080

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

1.2.1. Relevant identified uses

Intended for general public
Main use category : Consumer use
Function or use category : Repellents and attractants

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

KATADYN France
5 rue Gallice
38100 Grenoble - France
T +33 4 76 96 42 46 - F +33 4 76 96 39 81
info@katadyn.fr

1.4. Emergency telephone number

Emergency number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 3 H226
Serious eye damage/eye irritation, Category 2 H319

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Causes serious eye irritation.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS07

Signal word (CLP) : Warning
Hazard statements (CLP) : H226 - Flammable liquid and vapour.
H319 - Causes serious eye irritation.
Precautionary statements (CLP) : P103 - Read label before use.
P102 - Keep out of reach of children.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P101 - If medical advice is needed, have product container or label at hand.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P301+P312 - IF SWALLOWED: Call a POISON CENTER if you feel unwell.
P501 - Dispose of contents/container to hazardous or special waste collection point, in

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EUH-statements	: accordance with local, regional, national and/or international regulation. : EUH208 - Contains Citronellal, Citronellol, Eucalyptol, Linalool y Limonene. May produce an allergic reaction.
Child-resistant fastening	: Not applicable
Tactile warning	: Not applicable

2.3. Other hazards

PBT: not yet assessed

vPvB: not yet assessed

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Eucalyptus citriodora oil, hydrated, cyclized (Citriodiol®) (Active substance (Biocide))	(CAS-No.) 1245629-80-4	30 – 40	Eye Irrit. 2, H319
propan-2-ol; isopropyl alcohol; isopropanol	(CAS-No.) 67-63-0 (EC-No.) 200-661-7 (EC Index-No.) 603-117-00-0 (REACH-no) 01-2119457558-25-0005	10 – 20	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: If skin irritation occurs: Wash skin with plenty of water. Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after eye contact : Eye irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Flammable liquid and vapour.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

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6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Flammable vapours may accumulate in the container. Avoid contact with skin and eyes.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed.

Maximum storage period : 3 year/s Store in dry, cool, well-ventilated area

Storage temperature : 5 – 30 °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: colourless to slightly yellow.
Odour	: characteristic. lemon.
Odour threshold	: No data available
pH	: 6.5 – 9.0 Potentiometry
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 26 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0.91 (0.89 – 0.93) g/ml Digital densimetry
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Not explosive.

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Oxidising properties : No data available

Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Eucalyptus citriodora oil, hydrated, cyclized (Citriodiol®) (1245629-80-4)	
LD50 oral rat	> 2000 mg/kg (OECD 401 method)
LD50 dermal rat	> 2000 mg/kg (OECD 402 method)
LD50 dermal rabbit	EPA/FIFRA Guideline 81-3
LC50 Inhalation - Rat	> 1.03 mg/l

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
LD50 oral rat	5045 mg/kg
LD50 dermal rat	12800 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	72600 mg/l/4h

Skin corrosion/irritation : Not classified

pH: 6.5 – 9.0 Potentiometry

Serious eye damage/irritation : Causes serious eye irritation.

pH: 6.5 – 9.0 Potentiometry

Respiratory or skin sensitisation : Not classified.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

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Vaporizer	Spray

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified

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Hazardous to the aquatic environment, long-term (chronic) : Not classified

Eucalyptus citriodora oil, hydrated, cyclized (Citriodiol®) (1245629-80-4)	
LC50 - Fish [1]	> 35 mg/l Danio rerio (OECD 203)
EC50 - Crustacea [1]	> 26 mg/l (OECD 202 method)
EC50 72h - Algae [1]	> 37 mg/l Pseudokirchneriella (OECD 201)

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
LC50 - Fish [1]	9640 mg/l
EC50 - Crustacea [1]	9714 mg/l
EC50 72h - Algae [1]	> 1000 mg/l

12.2. Persistence and degradability

Eucalyptus citriodora oil, hydrated, cyclized (Citriodiol®) (1245629-80-4)	
Persistence and degradability	Readily biodegradable.

12.3. Bioaccumulative potential

Eucalyptus citriodora oil, hydrated, cyclized (Citriodiol®) (1245629-80-4)	
Partition coefficient n-octanol/water (Log Pow)	1.9

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
Partition coefficient n-octanol/water (Log Pow)	0.05

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

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PBT: not yet assessed	
vPvB: not yet assessed	
Component	
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information : Flammable vapours may accumulate in the container.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
1987	1987	1987	1987	1987
14.2. UN proper shipping name				
ALCOHOLS, N.O.S. (<entity:1186022 field:_CH EM_NAME>; propan-2-ol; isopropyl alcohol; isopropanol)	ALCOHOLS, N.O.S. (<entity:1186022 field:_CH EM_NAME>; propan-2-ol; isopropyl alcohol; isopropanol)	Alcohols, n.o.s. (<entity:1186022 field:_CH EM_NAME>; propan-2-ol; isopropyl alcohol; isopropanol)	ALCOHOLS, N.O.S. (<entity:1186022 field:_CH EM_NAME>; propan-2-ol; isopropyl alcohol; isopropanol)	ALCOHOLS, N.O.S. (<entity:1186022 field:_CH EM_NAME>; propan-2-ol; isopropyl alcohol; isopropanol)
Transport document description				
UN 1987 ALCOHOLS, N.O.S. (<entity:1186022 field:_CH EM_NAME>; propan-2-ol; isopropyl alcohol; isopropanol), 3, III, (D/E)	UN 1987 ALCOHOLS, N.O.S. (<entity:1186022 field:_CH EM_NAME>; propan-2-ol; isopropyl alcohol; isopropanol), 3, III	UN 1987 Alcohols, n.o.s. (<entity:1186022 field:_CH EM_NAME>; propan-2-ol; isopropyl alcohol; isopropanol), 3, III	UN 1987 ALCOHOLS, N.O.S. (<entity:1186022 field:_CH EM_NAME>; propan-2-ol; isopropyl alcohol; isopropanol), 3, III	UN 1987 ALCOHOLS, N.O.S. (<entity:1186022 field:_CH EM_NAME>; propan-2-ol; isopropyl alcohol; isopropanol), 3, III
14.3. Transport hazard class(es)				
3	3	3	3	3
14.4. Packing group				
III	III	III	III	III

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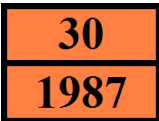
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ADR	IMDG	IATA	ADN	RID
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Classification code (ADR)	: F1
Special provisions (ADR)	: 274, 601
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBF
Vehicle for tank carriage	: FL
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Operation (ADR)	: S2
Hazard identification number (Kemler No.)	: 30
Orange plates	: 

Tunnel restriction code (ADR)	: D/E
EAC code	: •3YE

- Transport by sea

Special provisions (IMDG)	: 223, 274
Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-D
Stowage category (IMDG)	: A

- Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y344
PCA limited quantity max net quantity (IATA)	: 10L
PCA packing instructions (IATA)	: 355
PCA max net quantity (IATA)	: 60L
CAO packing instructions (IATA)	: 366
CAO max net quantity (IATA)	: 220L
Special provisions (IATA)	: A3, A180
ERG code (IATA)	: 3L

- Inland waterway transport

Classification code (ADN)	: F1
Special provisions (ADN)	: 274, 601
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1

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Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 0
- Rail transport	
Classification code (RID)	: F1
Special provisions (RID)	: 274, 601
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions (RID)	: TP1, TP29
Tank codes for RID tanks (RID)	: LGBF
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Colis express (express parcels) (RID)	: CE4
Hazard identification number (RID)	: 30

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3(a) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F	HUMAN USE INSECT REPELLENT BIOVECTROL HERBAL SPRAY ; propan-2-ol; isopropyl alcohol; isopropanol
3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	HUMAN USE INSECT REPELLENT BIOVECTROL HERBAL SPRAY ; Eucalyptus citriodora oil, hydrated, cyclized (Citriodiol®) ; propan-2-ol; isopropyl alcohol; isopropanol
40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	HUMAN USE INSECT REPELLENT BIOVECTROL HERBAL SPRAY ; propan-2-ol; isopropyl alcohol; isopropanol

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

For the following substances of this mixture a chemical safety assessment has been carried out

propan-2-ol; isopropyl alcohol; isopropanol

SECTION 16: Other information

Indication of changes:

Section	Changed item	Change	Comments
7.2	Storage temperature	Modified	

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Data sources : (non-exhaustive list). Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products. Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Local regulations.

Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
EUH208	Contains . May produce an allergic reaction.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Flam. Liq. 3	H226	On basis of test data
Eye Irrit. 2	H319	Calculation method

MONTPLET SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.