

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 24.04.2019

Revision: 24.04.2019

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

- **1.1 Product identifier**
- **Trade name:** *ARDAP Zerstäuber (Pumpspray)*
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** *Biocide - PT 18*
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
*Ardap Care GmbH
Franzstr. 95
D-46395 Bocholt
Tel.: +49 (0) 2871 -2487-0 | Fax: -66
Internet: www.quiko.de
E-mail: info@ardapcare.com*
- **Further information obtainable from:**
*Sales Department (via central phone number)
Tel.: +49 (0) 2871 -2487-0*
- **1.4 Emergency telephone number:**
*Central phone number
Tel.: +49 (0) 2871 -2487-0*

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
*Aquatic Acute 1 H400 Very toxic to aquatic life.
Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.*
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS09

- **Signal word** *Warning*
- **Hazard statements**
H410 Very toxic to aquatic life with long lasting effects.
- **Precautionary statements**
 - P101 If medical advice is needed, have product container or label at hand.*
 - P102 Keep out of reach of children.*
 - P260 Do not breathe spray.*
 - P262 Do not get in eyes, on skin, or on clothing.*
 - P273 Avoid release to the environment.*
 - P302+P352 IF ON SKIN: Wash with plenty of soap and water.*
 - P501 Dispose of contents / container as special waste.*
- **Additional information:**
Contains Permethrin (ISO), Orange, sweet, extract. May produce an allergic reaction.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*

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SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

· Description:

Water, organic solvents, emulsifier, biocidal active compounds, parfum, auxiliary agents.

contains: Permethrin (ISO) 5,17 g/kg; Piperonyl butoxide 6,40 g/kg; Chrysanthemum cinerariaefolium, extract 0,635 g/kg

· Dangerous components:

CAS: 67-63-0 EINECS: 200-661-7 Reg.nr.: 01-2119457558-25	Propan-2-ol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	≥2.5-<10%
CAS: 64741-65-7 EC number: 918-167-1 Reg.nr.: 01-2119472146-39	Hydrocarbons, C11-C12, isoalcanes, < 2% aromatics ⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; Aquatic Chronic 4, H413	2.5-10%
CAS: 52645-53-1 EINECS: 258-067-9	Permethrin (ISO) ⚠ Aquatic Acute 1, H400 (M=1000); Aquatic Chronic 1, H410 (M=1000); ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Sens. 1, H317	≥0.1-<1%
CAS: 8028-48-6 EINECS: 232-433-8 Reg.nr.: 01-2119493353-35	Orange, sweet, extract ⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317	≥0.25-<1%
CAS: 128-37-0 EINECS: 204-881-4	Butylated hydroxytoluene ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.1%
CAS: 89997-63-7 EINECS: 289-699-3	Chrysanthemum cinerariaefolium, extract ⚠ Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100); ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332	0.0635%

· Additional information:

Official name of CAS 89997-63-7: Chrysanthemum cinerariaefolium extract from open and mature flowers of Tanacetum cinerariifolium obtained with supercritical carbon dioxide.

For the wording of the listed hazard phrases refer to section 16.

EC-Numbers beginning with "9" are numbers given by ECHA for the purpose of registration according REACH. Eventually mentioned CAS-numbers valid for countries which are not subject to the REACH regulation or in regulations not yet updated with the new naming convention for hydrocarbon solvents.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· General information:

Take affected persons out into the fresh air.

Do not leave affected persons unattended.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· After skin contact:

Generally the product does not irritate the skin.

Wash with water and soap

· **After eye contact:** Rinse opened eye for several minutes under running water.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Inform doctor. Do not give milk or fatty oils.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

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SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear fully protective suit.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Avoid contact with skin / eyes and inhalation.
Wear protective clothing.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
No special precautions are necessary if used correctly.
Avoid inhalation and contact with the skin and the eyes.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

67-63-0 Propan-2-ol

WEL (Great Britain)	Short-term value: 1250 mg/m ³ , 500 ppm Long-term value: 999 mg/m ³ , 400 ppm
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128-37-0 Butylated hydroxytoluene

WEL (Great Britain)	Long-term value: 10 mg/m ³
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89997-63-7 Chrysanthemum cinerariaefolium, extract

IOELV (EU)	Long-term value: 5 mg/m ³
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· **DNELs****67-63-0 Propan-2-ol**

Oral	DNEL Endverbraucher/ Consumers /Consommateur	26 mg/kg BW/ day (.)
Dermal	DNEL - Endverbraucher/ Consumers /Consommateur	319 mg/kg BW /day (.)

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Inhalative	DNEL Arbeiter / Workers/ Travailleur	888 mg/kg BW /day (.)
	DNEL Endverbraucher/ Consumers /Consommateur	89 mg /m3 (.)
	DNEL Arbeiter / Workers/ Travailleur	500 mg /m3 (.)

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:** Wash hands before breaks and at the end of work.

· **Respiratory protection:** Not required.

· **Protection of hands:**

· **Material of gloves** If contamination is possible, use gloves made of nitrile according EN 374

· **Penetration time of glove material** > 480 min / 0,4 mm thickness

· **Eye protection:** Goggles recommended during refilling

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· Form:	Fluid
· Colour:	Whitish
· Odour:	lemon-like
· Odour threshold:	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

· Melting point/freezing point:	Undetermined.
· Initial boiling point and boiling range: 80 °C	Initial boiling point of the solvent

· **Flash point:** > 40 °C
does not maintain the combustion

· **Flammability (solid, gas):** Not applicable.

· **Ignition temperature:** 425 °C

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Product is not selfigniting.

· **Explosive properties:** Product does not present an explosion hazard.

· **Explosion limits:**

· Lower:	Not determined.
· Upper:	Not determined.

· **Vapour pressure:** Not determined.

· **Pressure (20°C)** not applicable

· **Density at 20 °C:** ca.1 g/cm³

· **Relative density** Not determined.

· **Vapour density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with water:** Fully miscible.

· **Partition coefficient: n-octanol/water:** Not determined.

· **Viscosity:**

· **Dynamic:** Not determined.

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Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	ca. 7.55 %
VOC (EC)	7.53 %
· 9.2 Other information	No further relevant information available.
· Additional information	Does not support burning.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

67-63-0 Propan-2-ol		
Oral	LD50	5045 mg/kg (rat)
Dermal	LD50	12800 mg/kg (rabbit)
Inhalative	LC50/4 h	30 mg/l (rat)
64741-65-7 Hydrocarbons, C11-C12, isoalcanes, < 2% aromatics		
Oral	LD50	>5000 mg/kg (rat)
51-03-6 2-(2-butoxyethoxy)ethyl 6-propylpiperonylether		
Oral	LD50	7181 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)
Inhalative	LC50/4 h	>5.9 mg/l (rat)
52645-53-1 Permethrin (ISO)		
Inhalative	LC50/4 h	2.3 mg/l (rat)
128-37-0 Butylated hydroxytoluene		
Oral	LD50	890 mg/kg (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

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SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

64741-65-7 Hydrocarbons, C11-C12, isoalcanes, < 2% aromatics

EC50	>1000 mg/kg (fis)
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128-37-0 Butylated hydroxytoluene

LC 50 / 96 h	>0.57 mg / l (Zebrabärbling / Brachydanio rerio)
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8003-34-7 Pyrethrins and Pyrethroids

EC 50 / 48h	0.012 mg / l (daphnia)
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LC 50 / 96 h	0.0052 mg / l (Regenbogenforelle / Rainbow trout)
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· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **Ecotoxicological effects:**

· **Remark:** Very toxic for fish

· **Additional ecological information:**

· **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation** Hand over to hazardous waste disposers.

· **European waste catalogue**

07 00 00	WASTES FROM ORGANIC CHEMICAL PROCESSES
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07 04 00	wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides
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07 04 01*	aqueous washing liquids and mother liquors
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· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR, IMDG, IATA**

UN3082

· **14.2 UN proper shipping name**

· **ADR**

3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIPENTENE, 2-(2-butoxyethoxy)ethyl 6-propylpiperonylether)

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<ul style="list-style-type: none"> · IMDG · IATA 	<p><i>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIPENTENE, 2-(2-butoxyethoxy)ethyl 6-propylpiperonylether), MARINE POLLUTANT</i></p> <p><i>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIPENTENE, 2-(2-butoxyethoxy)ethyl 6-propylpiperonylether)</i></p>
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- **14.3 Transport hazard class(es)**

- **ADR**



<ul style="list-style-type: none"> · Class · Label 	<p>9 (M6) Miscellaneous dangerous substances and articles.</p> <p>9</p>
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- **IMDG, IATA**



<ul style="list-style-type: none"> · Class · Label 	<p>9 Miscellaneous dangerous substances and articles.</p> <p>9</p>
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- **14.4 Packing group**

- **ADR, IMDG, IATA**

III

- **14.5 Environmental hazards:**

Product contains environmentally hazardous substances: Permethrin (ISO), Pyrethrins and Pyrethroids

- **Marine pollutant:**

Yes

- **Special marking (ADR):**

Symbol (fish and tree)

- **Special marking (IATA):**

Symbol (fish and tree)

Symbol (fish and tree)

- **14.6 Special precautions for user**

Warning: Miscellaneous dangerous substances and articles.

- **Danger code (Kemler):**

90

- **EMS Number:**

F-A,S-F

- **Stowage Category**

A

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

Not applicable.

- **Transport/Additional information:**

- **ADR**

- **Limited quantities (LQ)**

5L

- **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

- **Transport category**

3

- **Tunnel restriction code**

E

- **Remarks:**

Transportation as "LIMITED QUANTITIES" according 3.4 ADR is possible.

Sole marking: Sign for "Limited Quantities" (rhombus with two black edges)

Entry in the transportation document: Transportation according chapter 3.4 ADR

Tunnel category "E" in case of a load of 8000 kg (rgross weight) or more.

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· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIPENTENE, 2-(2-BUTOXYETHOXY)ETHYL 6-PROPYLPIPERONYLETHYL), 9, III

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category E1** Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t

- **Regulation (EU) No 649/2012**

52645-53-1	Permethrin (ISO)	Annex I Part I
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- **National regulations:**

Class	Share in %
Wasser	90.0
NK	8.0

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H413 May cause long lasting harmful effects to aquatic life.

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)

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*DNEL: Derived No-Effect Level (REACH)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Flam. Liq. 2: Flammable liquids – Category 2**Flam. Liq. 3: Flammable liquids – Category 3**Acute Tox. 4: Acute toxicity – Category 4**Skin Irrit. 2: Skin corrosion/irritation – Category 2**Eye Irrit. 2: Serious eye damage/eye irritation – Category 2**Skin Sens. 1: Skin sensitisation – Category 1**STOT SE 3: Specific target organ toxicity (single exposure) – Category 3**Asp. Tox. 1: Aspiration hazard – Category 1**Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1**Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1**Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2**Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4*

· *** Data compared to the previous version altered.**

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