

SAFETY DATA SHEET

Aerowipes

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

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

1.1. Product identifier

Product name Aerowipes
Product number ARW, EARW300, ZE

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

Identified uses Cleaning agent.
Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier ELECTROLUBE. A division of HK WENTWORTH LTD
 ASHBY PARK, COALFIELD WAY,
 ASHBY DE LA ZOUCH, LEICESTERSHIRE LE65 1JR
 UNITED KINGDOM
 +44 (0)1530 419600
 +44 (0)1530 416640
 info@hkw.co.uk

1.4. Emergency telephone number

Emergency telephone +44 1865 407333

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified
Health hazards Eye Dam. 1 - H318 Skin Sens. 1 - H317
Environmental hazards Not Classified

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.

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Precautionary statements	<p>P261 Avoid breathing vapour/ spray.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
Contains	<p>Alcohol C9-11, ethoxylated, d-Limonene, 1,2-Benzisothiazol-3(2H)-one, 2-Methyl-2H-isothiazol-3-one, Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)</p>
Supplementary precautionary statements	<p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P310 Immediately call a POISON CENTER/ doctor.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p>

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Dipropylene Glycol Monomethyl Ether	10-30%
CAS number: 34590-94-8 EC number: 252-104-2 REACH registration number: 01-2119450011-60-XXXX	
Classification Not Classified	
Alcohol C9-11, ethoxylated	10-30%
CAS number: 68439-46-3 EC number: 614-482-0	
Classification Acute Tox. 4 - H302 Eye Dam. 1 - H318	
Propane-1,2-diol, propoxylated	1-5%
CAS number: 25322-69-4 EC number: 500-039-8	
Classification Acute Tox. 4 - H302	

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d-Limonene	<1%
CAS number: 5989-27-5	EC number: 227-813-5
M factor (Acute) = 1	M factor (Chronic) = 1
Classification	
Flam. Liq. 3 - H226	
Skin Irrit. 2 - H315	
Skin Sens. 1 - H317	
Asp. Tox. 1 - H304	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	
1,2-Benzisothiazol-3(2H)-one	<1%
CAS number: 2634-33-5	EC number: 220-120-9
M factor (Acute) = 1	
Classification	
Acute Tox. 4 - H302	
Skin Irrit. 2 - H315	
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	
Aquatic Acute 1 - H400	
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)	<1%
CAS number: 55965-84-9	
M factor (Acute) = 10	M factor (Chronic) = 1
Classification	
Acute Tox. 3 - H301	
Acute Tox. 3 - H311	
Acute Tox. 2 - H330	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	
2,6-Di-tert-butyl-p-cresol	<1%
CAS number: 128-37-0	EC number: 204-881-4
M factor (Acute) = 1	M factor (Chronic) = 1
Classification	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	

The full text for all hazard statements is displayed in Section 16.

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SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.
Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.
Ingestion	Rinse mouth thoroughly with water. Remove any dentures. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.
Skin contact	It is important to remove the substance from the skin immediately. In the event of any sensitisation symptoms developing, ensure further exposure is avoided. Remove contamination with soap and water or recognised skin cleansing agent. Get medical attention if symptoms are severe or persist after washing.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue. If it is suspected that volatile contaminants are still present around the affected person, first aid personnel should wear an appropriate respirator or self-contained breathing apparatus. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.

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

General information	See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	May cause sensitisation or allergic reactions in sensitive individuals. Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
Skin contact	May cause skin sensitisation or allergic reactions in sensitive individuals. Prolonged contact may cause dryness of the skin.
Eye contact	Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes. Redness.

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

Notes for the doctor	Treat symptomatically. May cause sensitisation or allergic reactions in sensitive individuals.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
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Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure build-up.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances:
Harmful gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material. Avoid contact with skin and eyes.

6.2. Environmental precautions

Environmental precautions Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Approach the spillage from upwind. Small Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Large Spillages: If leakage cannot be stopped, evacuate area. Flush spilled material into an effluent treatment plant, or proceed as follows. Contain and absorb spillage with sand, earth or other non-combustible material. Place waste in labelled, sealed containers. Clean contaminated objects and areas thoroughly, observing environmental regulations. The contaminated absorbent may pose the same hazard as the spilled material. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Usage precautions

Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

Advice on general occupational hygiene

Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store away from incompatible materials (see Section 10). Store in accordance with local regulations. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Bund storage facilities to prevent soil and water pollution in the event of spillage. The storage area floor should be leak-tight, jointless and not absorbent.

Storage class

Chemical storage.

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Dipropylene Glycol Monomethyl Ether

Long-term exposure limit (8-hour TWA): WEL 50 ppm 308 mg/m³

Sk

2,6-Di-tert-butyl-p-cresol

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimise exposure.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

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Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.
Other skin and body protection	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
Hygiene measures	Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried out. Warn cleaning personnel of any hazardous properties of the product.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.
Environmental exposure controls	Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid-impregnated wipe.
Colour	Clear.
Odour	Citrus.
Odour threshold	Not available.
pH	pH (concentrated solution): 5.5-6.5
Melting point	Not available.
Initial boiling point and range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Evaporation factor	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	Not available.
Other flammability	Not available.
Vapour pressure	Not available.

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Vapour density	Not available.
Relative density	Not available.
Bulk density	1 kg/l
Solubility(ies)	Not available.
Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Not available.
Explosive properties	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity See the other subsections of this section for further details.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No potentially hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Materials to avoid No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

ATE oral (mg/kg) 2,087.68

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

Skin corrosion/irritation

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Animal data	Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Eye Dam. 1 - H318 Causes serious eye damage.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Based on available data the classification criteria are not met.
<u>Skin sensitisation</u>	
Skin sensitisation	May cause skin sensitisation or allergic reactions in sensitive individuals.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	Contains a substance which may be potentially carcinogenic. IARC Group 3 Not classifiable as to its carcinogenicity to humans.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
<u>Aspiration hazard</u>	
Aspiration hazard	Based on available data the classification criteria are not met.
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	May cause sensitisation or allergic reactions in sensitive individuals. Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
Skin contact	May cause skin sensitisation or allergic reactions in sensitive individuals. Prolonged contact may cause dryness of the skin.
Eye contact	Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes. Redness.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target organs	No specific target organs known.
Medical considerations	Skin disorders and allergies.

Toxicological information on ingredients.

Alcohol C9-11, ethoxylated

Acute toxicity - oral

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Notes (oral LD₅₀)	Harmful if swallowed.
ATE oral (mg/kg)	500.0
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	LD ₅₀ >2000 mg/kg, Dermal, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Skin corrosion/irritation</u>	
Animal data	Dose: 0.5 mL, 4 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema score: Very slight oedema - barely perceptible (1). REACH dossier information. Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Dose: 0.1 mL, 1 hour, Rabbit Causes serious eye damage.
<u>Skin sensitisation</u>	
Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Two-generation study - NOAEL 250 mg/kg/day, Dermal, Rat P REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity - development	Developmental toxicity: - NOAEL: 250 mg/kg/day, Dermal, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	NOAEL 500 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Propane-1,2-diol, propoxylated

<u>Acute toxicity - oral</u>	
ATE oral (mg/kg)	500.0

d-Limonene

<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	LD ₅₀ >2000 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Skin corrosion/irritation</u>	
Animal data	Dose: 0.5 mL, 4 hours, Rabbit REACH dossier information. Irritating.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Dose: 0.1 mL, 7 days, Rabbit REACH dossier information. Not irritating.
<u>Skin sensitisation</u>	

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Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Sensitising. REACH dossier information.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	DNA damage and/or repair: Negative. REACH dossier information. Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	NOAEL 1650 mg/kg/day, Oral, Mouse REACH dossier information. Based on available data the classification criteria are not met.
<u>Aspiration hazard</u>	
Aspiration hazard	1.003 cSt @ 25°C/77°F REACH dossier information. Aspiration hazard if swallowed.

1,2-Benzisothiazol-3(2H)-one

<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	675.3
Species	Rat
ATE oral (mg/kg)	675.3
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	LD ₅₀ >5000 mg/kg, Dermal, Rabbit Supplier's information. Based on available data the classification criteria are not met.
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Irritating to skin.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Dose: , 100% , Rabbit May cause serious eye damage.
<u>Skin sensitisation</u>	
Skin sensitisation	- Mouse: Sensitising.

2-Methyl-2H-isothiazol-3-one

<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	183.0
Species	Rat
ATE oral (mg/kg)	183.0
<u>Acute toxicity - dermal</u>	

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Acute toxicity dermal (LD₅₀ mg/kg) 242.0

Species Rat

ATE dermal (mg/kg) 242.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 0.11

Species Rat

ATE inhalation (dusts/mists mg/l) 0.11

Skin corrosion/irritation

Skin corrosion/irritation Corrosive to skin.

Serious eye damage/irritation

Serious eye damage/irritation Corrosivity to eyes is assumed.

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties.

Carcinogenicity

Carcinogenicity No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Reproductive toxicity - fertility This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - single exposure

STOT - single exposure Corrosive to the respiratory tract. May cause respiratory irritation.

Target organs Respiratory tract

2,6-Dimethyloct-7-en-2-ol

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 4100 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >5000 mg/kg, Dermal, Rabbit REACH dossier information. Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Dose: 0.1 mL, 10 days, Rabbit Causes serious eye irritation.

Skin sensitisation

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Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.
<u>Reproductive toxicity</u>	
Reproductive toxicity - development	Developmental toxicity: - NOAEL: 1000 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>7-Methyl-3-methylocta-1,6-diene</u>	
<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	LD ₅₀ >11390 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	LD ₅₀ >5000 mg/kg, Dermal, Rabbit REACH dossier information. Based on available data the classification criteria are not met.
<u>Skin corrosion/irritation</u>	
Human skin model test	Cell Viability 25.9% 15 minutes REACH dossier information. Irritating.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Dose: 0.1 mL, 8 days, Rabbit Causes serious eye irritation.
<u>Skin sensitisation</u>	
Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	NOAEL 500 mg/kg/day, Oral, Mouse REACH dossier information. Based on available data the classification criteria are not met.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	One-generation study - NOAEL 300 mg/kg/day, Oral, Rat P REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity - development	Fetotoxicity: - NOAEL: 500 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Aspiration hazard</u>	
Aspiration hazard	Aspiration hazard if swallowed.

Citral

Acute toxicity - oral

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Notes (oral LD₅₀)	LD ₅₀ 6800 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	LD ₅₀ >2000 mg/kg, Dermal, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Skin corrosion/irritation</u>	
Animal data	Dose: 0.5 mL, 15 minutes, Rabbit Erythema/eschar score: Well defined erythema (2). Oedema score: Slight oedema - edges of area well defined by definite raising (2). REACH dossier information. Highly irritating.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Dose: 0.1 mL, 8 days, Rabbit Causes serious eye irritation.
<u>Skin sensitisation</u>	
Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Sensitising. REACH dossier information.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	NOAEL 100 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Screening - NOAEL 1000 mg/kg/day, Oral, Rat P REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity - development	Developmental toxicity: - NOAEL: 200 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Octanal

<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	LD ₅₀ 4617 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	LD ₅₀ 5207 mg/kg, Dermal, Rabbit REACH dossier information. Based on available data the classification criteria are not met.
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	LC ₅₀ >830 mg/m ³ , Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Skin corrosion/irritation</u>	
Animal data	Dose: 0.5 mL, 4 hours, Rabbit Erythema/eschar score: Well defined erythema (2). Oedema score: Very slight oedema - barely perceptible (1). REACH dossier information. Irritating.

Aerowipes

Serious eye damage/irritation

Serious eye damage/irritation Dose: 0.1 mL, 14 days, Rabbit Causes serious eye irritation.

Skin sensitisation

Skin sensitisation Freund's complete adjuvant test - Guinea pig: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Genotoxicity - in vivo DNA damage and/or repair: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility One-generation study - NOAEL 300 mg/kg, Oral, Rat P REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity - development Developmental toxicity: - NOAEL: 1500 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Linalool

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >2000 mg/kg, Oral, Mouse REACH dossier information. Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ 5610 mg/kg, Dermal, Rabbit REACH dossier information. Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ >3.2 mg/l, Inhalation, Mouse REACH dossier information. Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Dose: 0.5 mL, 4 hours, Rabbit Erythema/eschar score: Well defined erythema (2). Oedema score: Very slight oedema - barely perceptible (1). REACH dossier information. Irritating.

Serious eye damage/irritation

Serious eye damage/irritation Dose: 0.1 mL, 24 hours, Rabbit Causes serious eye irritation.

Skin sensitisation

Skin sensitisation Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity

Aerowipes

Reproductive toxicity - fertility Screening - NOAEL 365 mg/kg/day, Oral, Rat P REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity - development Developmental toxicity: - NOAEL: 1000 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Decanal

Skin corrosion/irritation

Animal data Dose: 0.5 mL, 4 hours, Rabbit Erythema/eschar score: Well defined erythema (2). Oedema score: Very slight oedema - barely perceptible (1). REACH dossier information. Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Dose: 0.1 mL, 1 hour, Rabbit Causes serious eye irritation.

Skin sensitisation

Skin sensitisation Patch test - Human: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility One-generation study - NOAEL 300 mg/kg/day, Oral, Rat P REACH dossier information. Based on available data the classification criteria are not met.

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 64.0

Species Rat

ATE oral (mg/kg) 64.0

Acute toxicity - dermal

ATE dermal (mg/kg) 300.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 0.33

Species Rat

ATE inhalation (dusts/mists mg/l) 0.33

Skin corrosion/irritation

Skin corrosion/irritation Corrosive to skin. Causes burns.

Aerowipes

Serious eye damage/irritation

Serious eye damage/irritation Corrosivity to eyes is assumed.

Skin sensitisation

Skin sensitisation Epidemiological studies have shown evidence of skin sensitisation.

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties.

Genotoxicity - in vivo This substance has no evidence of mutagenic properties.

Carcinogenicity

Carcinogenicity No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Reproductive toxicity - fertility No evidence of reproductive toxicity in animal studies.

Allyl hexanoate

Acute toxicity - oral

ATE oral (mg/kg) 100.0

Acute toxicity - dermal

ATE dermal (mg/kg) 300.0

Geraniol

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 3600 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >5000 mg/kg, Dermal, Rabbit REACH dossier information. Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Dose: 0.5 mL, 4 hours, Rabbit Erythema/eschar score: Well defined erythema (2). Oedema score: Very slight oedema - barely perceptible (1). Primary dermal irritation index: 3.3 REACH dossier information. Irritating.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Skin sensitisation

Skin sensitisation Local Lymph Node Assay (LLNA) - Mouse: Sensitising. REACH dossier information.

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Aerowipes

Carcinogenicity

Carcinogenicity NOAEL 2000 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Screening - NOAEL 300 mg/kg/day, Dermal, Rat P REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity - development Developmental toxicity: - NOAEL: 300 mg/kg/day, Dermal, Rat REACH dossier information. Based on available data the classification criteria are not met.

p-Mentha-1,4-diene

Toxicological effects No data available.

Aspiration hazard

Aspiration hazard Aspiration hazard if swallowed.

Citronellol

Skin corrosion/irritation

Animal data Dose: 0.5 mL, 4 hours, Rabbit Erythema/eschar score: Well defined erythema (2). Oedema score: Slight oedema - edges of area well defined by definite raising (2). Primary dermal irritation index: 4 REACH dossier information. Irritating.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Skin sensitisation

Skin sensitisation Local Lymph Node Assay (LLNA) - Mouse: Sensitising. REACH dossier information.

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity NOAEL >2000 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Screening - NOAEL 300 mg/kg/day, Dermal, Rat P REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity - development Fetotoxicity: - NOAEL: 300 mg/kg/day, Dermal, Rat REACH dossier information. Based on available data the classification criteria are not met.

Pin-2(3)-ene

Skin corrosion/irritation

Human skin model test Cell Viability 39.6% 15 minutes REACH dossier information. Irritating.

Serious eye damage/irritation

Aerowipes

Serious eye damage/irritation	Dose: 0.1 mL, 8 days, Rabbit Based on available data the classification criteria are not met.
<u>Skin sensitisation</u>	
Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Sensitising. REACH dossier information.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
<u>Aspiration hazard</u>	
Aspiration hazard	Aspiration hazard if swallowed.
<u>2,6-Di-tert-butyl-p-cresol</u>	
Toxicological effects	Not regarded as a health hazard under current legislation.
<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	LD ₅₀ >2930 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	LD ₅₀ >2000 mg/kg, Dermal, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Skin corrosion/irritation</u>	
Animal data	Dose: 0.5 mL, 24 hours, Rabbit Erythema/eschar score: Very slight erythema - barely perceptible (1). Oedema score: No oedema (0). REACH dossier information. Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Dose: 100 mg, 72 hours, Rabbit REACH dossier information. Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	NOAEL 25 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Two-generation study - NOAEL 500 mg/kg/day, Oral, Rat P REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity - development	Developmental toxicity: - NOAEL: 100 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Aerowipes

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 25 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

p-Cymene

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ ~4750 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Skin corrosion/irritation

Skin corrosion/irritation Irritating to skin. Defatting, drying and cracking of skin. REACH dossier information.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation. REACH dossier information.

Specific target organ toxicity - single exposure

STOT - single exposure May cause respiratory system irritation.

Target organs Respiratory system, lungs

Aspiration hazard

Aspiration hazard Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

Pin-2(10)-ene

Skin corrosion/irritation

Human skin model test Cell Viability 38.5% 15 minutes REACH dossier information. Irritating.

Serious eye damage/irritation

Serious eye damage/irritation Dose: 0.1 mL, 8 days, Rabbit Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Local Lymph Node Assay (LLNA) - Mouse: Sensitising. REACH dossier information.

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - development Fetotoxicity: - NOAEL: 250 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Aspiration hazard if swallowed.

p-Mentha-1,3-diene

Toxicological effects No data recorded.

Aerowipes

Acute toxicity - oral

Notes (oral LD₅₀) cATpE: Converted Acute Toxicity Point Estimate. Harmful if swallowed.

ATE oral (mg/kg) 500.0

Aspiration hazard

Aspiration hazard Aspiration hazard if swallowed.

SECTION 12: Ecological Information

Ecotoxicity Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

Ecological information on ingredients.

p-Mentha-1,4-diene

Ecotoxicity No data on possible environmental effects have been found.

12.1. Toxicity

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

Ecological information on ingredients.

Dipropylene Glycol Monomethyl Ether

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: > 1000 mg/l, Poecilia reticulata (Guppy)

Alcohol C9-11, ethoxylated

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

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 57 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 2.5 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 96 hours: 1.4 mg/l, Selenastrum capricornutum

d-Limonene

Toxicity Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Very toxic to aquatic life with long lasting effects.

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC₅₀, 96 hours: 0.72 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 0.36 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 150 mg/l, Desmodemus subspicatus

Aerowipes

Acute toxicity - microorganisms EC₅₀, 3 hours: 209 mg/l, Activated sludge

Chronic aquatic toxicity

M factor (Chronic) 1

1,2-Benzisothiazol-3(2H)-one

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC₅₀, 96 hours: 1.9 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates LC₅₀, 96 hours: 1.9 mg/l, Mysidopsis bahia
EC₅₀, 48 hours: 2.94 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 96 hours: 0.38 mg/l, Pseudokirchneriella subcapitata

2-Methyl-2H-isothiazol-3-one

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC₅₀, 96 hours: 4.77 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates LC₅₀, 48 hours: 0.85 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 0.158 mg/l, Algae

2,6-Dimethyloct-7-en-2-ol

Toxicity Aquatic toxicity is unlikely to occur. Based on available data the classification criteria are not met.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 27.8 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 38 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 65 mg/l, Desmodesmus subspicatus

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates NOEC, 21 days: 9.5 mg/l, Daphnia magna

7-Methyl-3-methyleneocta-1,6-diene

Toxicity Not toxic at limit of water solubility.

Citral

Aerowipes

Toxicity	Based on available data the classification criteria are not met.
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hours: 6.78 mg/l, <i>Leuciscus idus</i> (Golden orfe)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 6.8 mg/l, <i>Daphnia magna</i>
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 103.8 mg/l, <i>Scenedesmus subspicatus</i>

Octanal

Toxicity	Aquatic Chronic 2 - H411 Toxic to aquatic life with long lasting effects.
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 14 days: 7.9 mg/l, <i>Poecilia reticulata</i> (Guppy)
Acute toxicity - aquatic invertebrates	LC ₅₀ , 48 hours: 3.48 mg/l, <i>Daphnia magna</i>
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 1.79 mg/l, <i>Pseudokirchneriella subcapitata</i>

Linalool

Toxicity	Aquatic toxicity is unlikely to occur. Based on available data the classification criteria are not met.
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hours: 27.8 mg/l, <i>Oncorhynchus mykiss</i> (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 59 mg/l, <i>Daphnia magna</i>
Acute toxicity - aquatic plants	EC ₅₀ , 96 hours: 88.3 mg/l, <i>Scenedesmus subspicatus</i>

Decanal

Toxicity	Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting effects.
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hours: 1.45 mg/l, <i>Oncorhynchus mykiss</i> (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 1.17 mg/l, <i>Daphnia magna</i>
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 1.79 mg/l, <i>Selenastrum capricornutum</i>

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)

<u>Acute aquatic toxicity</u>	
LE(C)₅₀	0.01 < L(E)C ₅₀ ≤ 0.1
M factor (Acute)	10

Aerowipes

Acute toxicity - fish	LC ₅₀ , 96 hours: 0.19 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 0.16 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 0.027 mg/l, Selenastrum capricornutum
<u>Chronic aquatic toxicity</u>	
M factor (Chronic)	1

Geraniol

Toxicity Aquatic toxicity is unlikely to occur. Based on available data the classification criteria are not met.

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 22 mg/l, Brachydanio rerio (Zebra Fish)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 10.8 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 13.1 mg/l, Desmodosmus subspicatus

p-mentha-1,4(8)-diene

Acute aquatic toxicity

LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
<u>Chronic aquatic toxicity</u>	
M factor (Chronic)	1

p-Mentha-1,4-diene

Toxicity No negative effects on the aquatic environment are known.

Citronellol

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

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 14.66 mg/l, Leuciscus idus (Golden orfe)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 17.48 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 2.4 mg/l, Scenedesmus subspicatus

Pin-2(3)-ene

Toxicity Aquatic toxicity is unlikely to occur.

2,6-Di-tert-butyl-p-cresol

Aerowipes

Toxicity Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Very toxic to aquatic life with long lasting effects.

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 0.48 mg/l, Daphnia magna

Chronic aquatic toxicity

M factor (Chronic) 1

Tridec-2-enenitrile

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Chronic aquatic toxicity

M factor (Chronic) 1

Dipentene Limonene

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Chronic aquatic toxicity

M factor (Chronic) 1

p-Cymene

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 44 mg/l, Lepomis macrochirus (Bluegill)

Acute toxicity - aquatic invertebrates LC₅₀, 96 hours: 4.4 mg/l, Americamysis bahia
LC₅₀, 48 hours: 6.5 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 96 hours: 49 mg/l, Pseudokirchneriella subcapitata

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates NOEC, 21 days: 0.46 mg/l, Daphnia magna

Pin-2(10)-ene

Toxicity Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Very toxic to aquatic life with long lasting effects.

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Aerowipes

Acute toxicity - fish	LC ₅₀ , 96 hours: 0.557 mg/l, Cyprinus carpio (Common carp)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 1.25 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 48 hours: 0.826 mg/l, Pseudokirchneriella subcapitata
<u>Chronic aquatic toxicity</u>	
M factor (Chronic)	1

p-Mentha-1,3-diene

Toxicity	Aquatic Chronic 2 - H411 Toxic to aquatic life with long lasting effects.
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hours: 7.7 mg/l, Pimephales promelas (Fat-head Minnow), Estimated value.
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 25.5 mg/l, Daphnia magna, Estimated value.

(S)-p-mentha-1,8-diene

<u>Acute aquatic toxicity</u>	
LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
<u>Chronic aquatic toxicity</u>	
M factor (Chronic)	1

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Ecological information on ingredients.

Dipropylene Glycol Monomethyl Ether

Persistence and degradability	The product is readily biodegradable.
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Alcohol C9-11, ethoxylated

Persistence and degradability	The substance is readily biodegradable.
Biodegradation	Water - Degradation 72%: 28 days

1-(2-Butoxy-1-methylethoxy)propan-2-ol

Persistence and degradability	The product is readily biodegradable.
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d-Limonene

Persistence and degradability	The substance is readily biodegradable.
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Aerowipes

Phototransformation Water - Half-life : 0.365 hours
Estimated value.

Biodegradation Water - Degradation 80%: 28 days

2-Methyl-2H-isothiazol-3-one

Biodegradation - Degradation ~98%: Estimated value.
Expected to be readily biodegradable.

2,6-Dimethyloct-7-en-2-ol

Persistence and degradability The substance is readily biodegradable.

Biodegradation Water - Degradation 72%: 28 days

7-Methyl-3-methyleneocta-1,6-diene

Persistence and degradability The substance is readily biodegradable.

Biodegradation Water - Degradation 76%: 28 days

Citral

Persistence and degradability The substance is readily biodegradable.

Phototransformation Water - DT₅₀ : 37.35 minutes

Biodegradation Water - Degradation 85-95%: 28 days

Octanal

Persistence and degradability Moderately biodegradable.

Biodegradation Water - Degradation 46%: 28 days

Linalool

Persistence and degradability The substance is readily biodegradable.

Biodegradation Water - Degradation 64.2%: 28 days

Decanal

Persistence and degradability The substance is readily biodegradable.

Biodegradation Water - Degradation 82%: 28 days

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)

Biodegradation Water - DT₅₀ : 0.2 - 1.3 days

Aerowipes

Geraniol

Persistence and degradability The substance is readily biodegradable.

Biodegradation Water - Degradation 90-100%: 3 days

p-Mentha-1,4-diene

Persistence and degradability The degradability of the product is not known.

Citronellol

Persistence and degradability The substance is readily biodegradable.

Phototransformation Water - DT₅₀ : 3.9 hours

Biodegradation Water - Degradation 80-90%: 28 days

Pin-2(3)-ene

Persistence and degradability The product is biodegradable.

Phototransformation Water - DT₅₀ : 0.44-1.41 hours

2,6-Di-tert-butyl-p-cresol

Persistence and degradability Not readily biodegradable.

Phototransformation Water - DT₅₀ : 7 hours
Estimated value.

Biodegradation Water - Degradation 4.5%: 28 days

p-Cymene

Biodegradation Water - Degradation 88%: 14 days

Pin-2(10)-ene

Persistence and degradability The substance is readily biodegradable.

Biodegradation Water - Degradation 76%: 28 days

p-Mentha-1,3-diene

Persistence and degradability The product is expected to be biodegradable.

Biodegradation - Half-life : 15 days
Estimated value.

12.3. Bioaccumulative potential

Aerowipes

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

Ecological information on ingredients.

Dipropylene Glycol Monomethyl Ether

Bioaccumulative potential Bioaccumulation is unlikely.

Alcohol C9-11, ethoxylated

Bioaccumulative potential BCF: 12.7, Fish Bioaccumulation is unlikely.

Partition coefficient log Pow: 3.75

d-Limonene

Bioaccumulative potential BCF: 1022, Estimated value.

Partition coefficient log Pow: 4.38

1,2-Benzisothiazol-3(2H)-one

Partition coefficient log Pow: 1.19

2-Methyl-2H-isothiazol-3-one

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: -0.75

2,6-Dimethyloct-7-en-2-ol

Bioaccumulative potential BCF: 64.8, Estimated value. Bioaccumulation is unlikely.

Partition coefficient log Pow: 3.25

7-Methyl-3-methyleneocta-1,6-diene

Bioaccumulative potential Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.

Partition coefficient log Pow: 5.285

Citral

Bioaccumulative potential BCF: 89.72, Estimated value. The product is not bioaccumulating.

Partition coefficient log Pow: 2.76

Octanal

Bioaccumulative potential BCF: 95, Estimated value. Bioaccumulation is unlikely.

Partition coefficient log Pow: 3.5

Linalool

Aerowipes

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: 2.84

Decanal

Bioaccumulative potential BCF: 159-194, Oncorhynchus mykiss (Rainbow trout) Bioaccumulation is unlikely.

Partition coefficient log Pow: 3.8

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: 0.401

Geraniol

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: 2.6

p-Mentha-1,4-diene

Bioaccumulative potential No data available on bioaccumulation.

Citronellol

Bioaccumulative potential BCF: 82.59, Estimated value. Bioaccumulation is unlikely.

Partition coefficient log Pow: 3.41

Pin-2(3)-ene

Bioaccumulative potential BCF: 1845, Estimated value. Bioaccumulation is unlikely.

Partition coefficient log Pow: 4.487

2,6-Di-tert-butyl-p-cresol

Bioaccumulative potential BCF: 330, Cyprinus carpio (Common carp)

Partition coefficient log Pow: 5.1

p-Cymene

Bioaccumulative potential No data available on bioaccumulation.

Pin-2(10)-ene

Bioaccumulative potential BCF: 383.1, Estimated value. Bioaccumulation is unlikely.

Partition coefficient log Pow: 4.425

p-Mentha-1,3-diene

Bioaccumulative potential log BCF: 4, Estimated value. Bioaccumulation is unlikely.

Aerowipes

Partition coefficient log Kow: 4.25

12.4. Mobility in soil

Mobility No data available.

Ecological information on ingredients.

Alcohol C9-11, ethoxylated

Mobility The product is soluble in water.

d-Limonene

Mobility The product is partly soluble in water and may spread in the aquatic environment.

Adsorption/desorption coefficient Water - Koc: 1984 @ 25°C

2-Methyl-2H-isothiazol-3-one

Mobility No data available.

2,6-Dimethyloct-7-en-2-ol

Mobility The product is soluble in water.

Adsorption/desorption coefficient Water - Log Koc: 2.25 @ 35°C

7-Methyl-3-methyleneocta-1,6-diene

Mobility The product is insoluble in water.

Adsorption/desorption coefficient Estimated value. Water - Koc: 5864 @ 20°C

Citral

Mobility The product is partly soluble in water and may spread in the aquatic environment.

Adsorption/desorption coefficient Water - Log Koc: 2.169 @ 25°C Estimated value.

Henry's law constant 0.000376 atm m³/mol @ 25°C

Octanal

Mobility The product is partly soluble in water and may spread in the aquatic environment.

Adsorption/desorption coefficient Estimated value. Water - Log Koc: 2.63 @ 25°C

Surface tension 27.9 mN/m @ 20°C

Linalool

Mobility The product is soluble in water.

Decanal

Aerowipes

Mobility The product is partly soluble in water and may spread in the aquatic environment.

Adsorption/desorption coefficient Water - Log Koc: 2.9 @ 35°C

Surface tension 60 mN/m @ 18.2°C

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)

Mobility No data available.

Geraniol

Mobility The product is soluble in water.

Adsorption/desorption coefficient Water - Log Koc: 1.85 @ 25°C Estimated value.

p-Mentha-1,4-diene

Mobility No data available.

Citronellol

Mobility The product is soluble in water.

Adsorption/desorption coefficient Water - Log Koc: 1.85 @ 25°C

Henry's law constant 5.76 Pa m³/mol @ 25°C

Pin-2(3)-ene

Mobility The product is insoluble in water.

Adsorption/desorption coefficient Water - Koc: 2184 @ 25°C Estimated value.

2,6-Di-tert-butyl-p-cresol

Mobility The product is partly soluble in water and may spread in the aquatic environment.

Henry's law constant 0.342 Pa m³/mol @ 25°C

p-Cymene

Mobility Volatile liquid. Slightly soluble in water.

Pin-2(10)-ene

Mobility The product is partly soluble in water and may spread in the aquatic environment.

Adsorption/desorption coefficient Water - Koc: 2080 @ 25°C Estimated value.

p-Mentha-1,3-diene

Aerowipes

Mobility No data available.

12.5. Results of PBT and vPvB assessment

Ecological information on ingredients.

Alcohol C9-11, ethoxylated

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

d-Limonene

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria. Estimated value.

1,2-Benzisothiazol-3(2H)-one

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

2-Methyl-2H-isothiazol-3-one

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

2,6-Dimethyloct-7-en-2-ol

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

7-Methyl-3-methyleneocta-1,6-diene

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Citral

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Octanal

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Linalool

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Decanal

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Aerowipes

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Geraniol

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

p-Mentha-1,4-diene

Results of PBT and vPvB assessment No data available.

Citronellol

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Pin-2(3)-ene

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

2,6-Di-tert-butyl-p-cresol

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

p-Cymene

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Pin-2(10)-ene

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

p-Mentha-1,3-diene

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Aerowipes

General information	The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.
Disposal methods	Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

Transport labels

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

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

Transport in bulk according to Not applicable.

**Annex II of MARPOL 73/78
and the IBC Code**

SECTION 15: Regulatory information

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

National regulations

Health and Safety at Work etc. Act 1974 (as amended).
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EH40/2005 Workplace exposure limits.

Aerowipes

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Commission Regulation (EU) No 2015/830 of 28 May 2015.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

None of the ingredients are listed or exempt.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
IATA: International Air Transport Association.
ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
IMDG: International Maritime Dangerous Goods.
CAS: Chemical Abstracts Service.
ATE: Acute Toxicity Estimate.
LC₅₀: Lethal Concentration to 50 % of a test population.
LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
EC₅₀: 50% of maximal Effective Concentration.
PBT: Persistent, Bioaccumulative and Toxic substance.
vPvB: Very Persistent and Very Bioaccumulative.

Classification abbreviations and acronyms Eye Dam. = Serious eye damage
Skin Sens. = Skin sensitisation

Classification procedures according to Regulation (EC) 1272/2008 Eye Dam. 1 - H318: Skin Sens. 1 - H317: : Calculation method.

Training advice Read and follow manufacturer's recommendations. Only trained personnel should use this material.

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Aerowipes

Hazard statements in full

H226 Flammable liquid and vapour.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H330 Fatal if inhaled.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.