



SAFETY DATA SHEET

Maxiclene 400ml Aerosol

According to Regulation (EC) No 1907/2006, Annex II, as amended.

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

1.1. Product identifier

Product name Maxiclene 400ml Aerosol

Product number AMXL400, ZA

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 AF INTERNATIONAL. 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 Aerosol 1 - H222, H229

Health hazards Not Classified

Environmental hazards Not Classified

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements H222 Extremely flammable aerosol.
 H229 Pressurised container: may burst if heated.

Maxiclene 400ml Aerosol

Precautionary statements P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P251 Do not pierce or burn, even after use.
 P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
 P102 Keep out of reach of children.

Detergent labelling < 5% aliphatic hydrocarbons, < 5% anionic surfactants, < 5% non-ionic surfactants, Contains BENZISOTHIAZOLINONE, METHYLISOTHIAZOLINONE, METHYLCHLOROISOTHIAZOLINONE AND METHYLISOTHIAZOLINONE

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

Petroleum gases, liquefied CAS number: 68476-85-7 EC number: 270-704-2	1-5%
Classification Flam. Gas 1 - H220 Press. Gas (Liq.) - H280	
2-Butoxyethanol CAS number: 111-76-2 EC number: 203-905-0 REACH registration number: 01-2119475108-36-XXXX	1-5%
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics CAS number: 64742-47-8 EC number: 926-141-6 REACH registration number: 01-2119456620-43-XXXX	1-5%
Classification Asp. Tox. 1 - H304	
Propan-2-ol CAS number: 67-63-0 EC number: 200-661-7 REACH registration number: 01-2119457558-25-XXXX	<1%
Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	

Maxiclene 400ml Aerosol

2-Aminoethanol		<1%
CAS number: 141-43-5	EC number: 205-483-3	REACH registration number: 01-2119486455-28-XXXX
Classification		
Acute Tox. 4 - H302		
Acute Tox. 4 - H312		
Acute Tox. 4 - H332		
Skin Corr. 1B - H314		
Eye Dam. 1 - H318		
STOT SE 3 - H335		
Benzyl-C12-14-alkyldimethylammonium chlorides		<1%
CAS number: 68424-85-1	EC number: 939-350-2	REACH registration number: 01-2119970550-39-0000
M factor (Acute) = 10	M factor (Chronic) = 1	
Classification		
Acute Tox. 4 - H302		
Skin Corr. 1B - H314		
Eye Dam. 1 - H318		
Aquatic Acute 1 - H400		
Aquatic Chronic 1 - H410		
Sodium hydroxide		<1%
CAS number: 1310-73-2	EC number: 215-185-5	
Classification		
Skin Corr. 1A - H314		
Eye Dam. 1 - H318		
Ethanol		<1%
CAS number: 64-17-5	EC number: 200-578-6	REACH registration number: 01-2119457610-43-XXXX
Classification		
Flam. Liq. 2 - H225		

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

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.

Maxiclene 400ml Aerosol

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	Rinse with water.
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.

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	Spray/mists may cause respiratory tract irritation.
Ingestion	Due to the physical nature of this product, it is unlikely that ingestion will occur.
Skin contact	Repeated exposure may cause skin dryness or cracking.
Eye contact	May be slightly irritating to eyes. May cause discomfort.

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

Notes for the doctor	Treat symptomatically.
-----------------------------	------------------------

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.
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. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant.
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.

Maxiclene 400ml Aerosol

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. Evacuate area. Risk of explosion.

6.2. Environmental precautions

Environmental precautions Avoid discharge to the aquatic environment. 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. 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

Usage precautions Keep out of the reach of children. 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. Avoid exposing aerosol containers to high temperatures or direct sunlight. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Spray will evaporate and cool rapidly and may cause frostbite or cold burns if in contact with skin. Avoid contact with eyes. Avoid inhalation of vapours and spray/mists.

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 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. Protect from sunlight. Do not store near heat sources or expose to high temperatures. Do not expose to temperatures exceeding 50°C/122°F. 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.

Maxiclene 400ml Aerosol

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Petroleum gases, liquefied

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1750 mg/m³

Short-term exposure limit (15-minute): WEL 1250 ppm 2180 mg/m³

2-Butoxyethanol

Long-term exposure limit (8-hour TWA): WEL 25 ppm 123 mg/m³

Short-term exposure limit (15-minute): WEL 50 ppm 246 mg/m³

Sk

Propan-2-ol

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m³

2-Aminoethanol

Long-term exposure limit (8-hour TWA): WEL 1 ppm 2.5 mg/m³

Short-term exposure limit (15-minute): WEL 3 ppm 7.6 mg/m³

Sk

Sodium hydroxide

Short-term exposure limit (15-minute): WEL 2 mg/m³

Ethanol

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 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. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

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.

Maxiclene 400ml Aerosol

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.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Aerosol. Liquid.
Colour	White.
Odour	Characteristic.
Odour threshold	Not available.
pH	pH (concentrated solution): 7-8
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.
Vapour density	Not available.
Relative density	Not available.
Bulk density	Not available.
Solubility(ies)	Not available.
Partition coefficient	Not available.
Auto-ignition temperature	Not available.

Maxiclene 400ml Aerosol

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 There are no known reactivity hazards associated with this product.

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 Avoid exposing aerosol containers to high temperatures or direct sunlight. Pressurised container: may burst if heated

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) 64,749.64

Acute toxicity - dermal

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

ATE dermal (mg/kg) 40,793.02

Acute toxicity - inhalation

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

ATE inhalation (vapours mg/l) 407.93

Skin corrosion/irritation

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

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Maxiclene 400ml Aerosol

Respiratory sensitisation	Based on available data the classification criteria are not met.
<u>Skin sensitisation</u>	
Skin sensitisation	Based on available data the classification criteria are not met.
<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/a group of substances which may cause cancer. IARC Group 1 Carcinogenic 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	Spray/mists may cause respiratory tract irritation.
Ingestion	Due to the physical nature of this product, it is unlikely that ingestion will occur.
Skin contact	Repeated exposure may cause skin dryness or cracking.
Eye contact	May be slightly irritating to eyes. May cause discomfort.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target organs	No specific target organs known.
<u>Toxicological information on ingredients.</u>	

Water

Toxicological effects Not regarded as a health hazard under current legislation.

Petroleum gases, liquefied

Toxicological effects Not regarded as a health hazard under current legislation.

Germ cell mutagenicity

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.

Maxiclene 400ml Aerosol

Carcinogenicity

Carcinogenicity NOAEL 10000 ppm, Inhalation, Mouse REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Fertility - NOAEC 9000 ppm, Inhalation, Rat F1 REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity - development Developmental toxicity: - NOAEC: 10426 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEC 10000 ppmV/4hr/day, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

2-Butoxyethanol

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,746.0

Species Rat

Notes (oral LD₅₀) REACH dossier information. Harmful if swallowed.

ATE oral (mg/kg) 1,746.0

Acute toxicity - dermal

Notes (dermal LD₅₀) cATpE: Converted Acute Toxicity Point Estimate. Harmful in contact with skin.

ATE dermal (mg/kg) 1,100.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀) cATpE: Converted Acute Toxicity Point Estimate. Harmful if inhaled.

ATE inhalation (vapours mg/l) 11.0

Skin corrosion/irritation

Animal data Dose: 0.5 mL, 4 hours, Rabbit Erythema/eschar score: Well defined erythema (2). Oedema score: No oedema (0). 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 Guinea pig maximization test (GPMT) - 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 Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Carcinogenicity

Maxiclene 400ml Aerosol

Carcinogenicity	NOAEC 125 ppm, Inhalation, Mouse 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 720 mg/kg/day, Oral, Mouse P REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity - development	Maternal toxicity: - NOAEL: 50 ppm, Inhalation, Rabbit 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 <69 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics</u>	
<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	LD ₅₀ 15000 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 3160 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 4951 mg/l, 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. Repeated exposure may cause skin dryness or cracking.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Dose: 0.1 mL, 1 second, Rabbit REACH dossier information. Based on available data the classification criteria are not met.
<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.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	NOAEC 1100 mg/m ³ , Inhalation, Mouse REACH dossier information. Based on available data the classification criteria are not met.
<u>Reproductive toxicity</u>	

Maxiclene 400ml Aerosol

Reproductive toxicity - fertility Fertility, One-generation study - NOAEL 750 mg/kg/day, Oral, Rat F1 REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity - development Maternal toxicity: - NOAEL: >5220 mg/m³, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEC >10400 mg/m³, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard 2.4 cSt @ 20°C Aspiration hazard if swallowed.

Propan-2-ol

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ 5840 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Primary dermal irritation index: 0 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 second, Rabbit Causes serious eye irritation.

Skin sensitisation

Skin sensitisation Buehler 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 Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity NOAEL 5000 ppm, Inhalation, 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.

Specific target organ toxicity - single exposure

STOT - single exposure STOT SE 3 - H336 May cause drowsiness or dizziness.

Target organs Central nervous system

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEC 5000 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

2-Aminoethanol

Acute toxicity - oral

Maxiclene 400ml Aerosol

Acute toxicity oral (LD₅₀ mg/kg)	1,515.0
Species	Rat
Notes (oral LD₅₀)	REACH dossier information. Harmful if swallowed.
ATE oral (mg/kg)	500.0
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD₅₀ mg/kg)	1,025.0
Species	Rabbit
Notes (dermal LD₅₀)	IUCLID Harmful in contact with skin.
ATE dermal (mg/kg)	1,100.0
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC₅₀ dust/mist mg/l)	1.3
Species	Rat
Notes (inhalation LC₅₀)	Supplier's information. Harmful if inhaled.
ATE inhalation (dusts/mists mg/l)	1.3
<u>Skin corrosion/irritation</u>	
Animal data	Dose: 0.5 mL, 4 hours, Erythema/eschar score: Severe erythema (beef redness) to eschar formation preventing grading of erythema (4). REACH dossier information. Corrosive.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Dose: 0.005 mL, 10 seconds, 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	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>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Two-generation study - NOAEL 1000 ppm, Oral, Rat F1 REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity - development	Maternal toxicity: - NOAEL: 120 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	STOT SE 3 - H335 May cause respiratory irritation.

Maxiclene 400ml Aerosol

Target organs Respiratory system, lungs

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEC 10 mg/m³, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

Fatty acids, C16-18 and C18-unsatd.

Toxicological effects Not regarded as a health hazard under current legislation.

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >2000 mg/kg, Oral, Rat Supplier's information. Based on available data the classification criteria are not met.

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,080.0

Species Rat

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

ATE oral (mg/kg) 1,080.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >2000 mg/kg, Dermal, Rat 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 Primary dermal irritation index: 2.17 REACH dossier information. Irritating.

Serious eye damage/irritation

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

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - 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 Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Three-generation study - NOAEL 350 mg/kg/day, Oral, Rat P, F1 REACH dossier information. Based on available data the classification criteria are not met.

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

Specific target organ toxicity - repeated exposure

Maxiclene 400ml Aerosol

STOT - repeated exposure NOAEL 125 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Alcohol C9-11, ethoxylated

Acute toxicity - oral

Notes (oral LD₅₀) Harmful if swallowed.

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >2000 mg/kg, Dermal, Rat 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: No erythema (0). 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 damage.

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - 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.

Reproductive toxicity

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.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 500 mg/kg/day, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Benzyl-C12-14-alkyldimethylammonium chlorides

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 795.0

Species Rat

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

ATE oral (mg/kg) 795.0

Acute toxicity - dermal

Maxiclene 400ml Aerosol

Notes (dermal LD₅₀) LD₅₀ 3412.5 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 REACH dossier information. Corrosive.

Serious eye damage/irritation

Serious eye damage/irritation Corrosive to skin. Corrosivity to eyes is assumed.

Skin sensitisation

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

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

Reproductive toxicity - fertility Two-generation study - NOAEL 61 mg/kg/day, Oral, Rat P REACH dossier information. Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Not relevant. Solid.

(2-Hydroxyethyl)dimethyl[3-[(1-oxooctadecyl)amino]propyl]ammonium nitrate

Skin corrosion/irritation

Skin corrosion/irritation Irritating to skin.

Serious eye damage/irritation

Serious eye damage/irritation Irritating to eyes.

Sodium hydroxide

Skin corrosion/irritation

Skin corrosion/irritation Corrosive to skin.

Serious eye damage/irritation

Serious eye damage/irritation Corrosive to skin. Corrosivity to eyes is assumed.

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 Bacterial reverse mutation test: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Aspiration hazard

Maxiclene 400ml Aerosol

Aspiration hazard Not relevant. Solid.

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

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 675.3

Species Rat

ATE oral (mg/kg) 675.3

Acute toxicity - dermal

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

Skin corrosion/irritation

Skin corrosion/irritation Irritating to skin.

Serious eye damage/irritation

Serious eye damage/irritation Dose: , 100% , Rabbit May cause serious eye damage.

Skin sensitisation

Skin sensitisation - Mouse: Sensitising.

Ethanol

Toxicological effects Not regarded as a health hazard under current legislation.

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 10470 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LD₅₀ 124.7 mg/l, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Dose: 0.2 mL, 24 hours, Rabbit Primary dermal irritation index: 0 REACH dossier information. Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Local Lymph Node Assay (LLNA) - Mouse: 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.

Carcinogenicity

IARC carcinogenicity IARC Group 1 Carcinogenic to humans.

Reproductive toxicity

Maxiclene 400ml Aerosol

Reproductive toxicity - fertility	Two-generation study - NOAEL 15% , Oral, Mouse REACH dossier information. Based on available data the classification criteria are not met.
Reproductive toxicity - development	Maternal toxicity: - NOAEL: 16000 ppm, Inhalation, Rat REACH dossier information. Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	LOAEL ~4000 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
---------------------------------	--

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

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 183.0

Species Rat

ATE oral (mg/kg) 183.0

Acute toxicity - dermal

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

Maxiclene 400ml Aerosol

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

Target organs Respiratory tract

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.

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.

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.

(2-Hydroxyethyl)dimethyl[3-[(1-oxooctadecyl)amino]propyl]ammonium nitrate

Maxiclene 400ml Aerosol

Ecotoxicity Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting effects.

12.1. Toxicity

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

Ecological information on ingredients.

Water

Toxicity No negative effects on the aquatic environment are known.

Petroleum gases, liquefied

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: 147.54 mg/l, Freshwater fish
Estimated value.

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 16.33 mg/l, Daphnia magna
Estimated value.

Acute toxicity - aquatic plants EC₅₀, 96 hours: 11.89 mg/l, Freshwater algae
Estimated value.

2-Butoxyethanol

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: 1474 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 1550 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 911 mg/l, Pseudokirchneriella subcapitata

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOEL, 21 days: >100 mg/l, Brachydanio rerio (Zebra Fish)

Chronic toxicity - aquatic invertebrates NOEC, 21 days: 100 mg/l, Daphnia magna

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

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

Acute aquatic toxicity

Acute toxicity - fish LL₅₀, 96 hours: >1000 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EL₅₀, 48 hours: >10000 mg/l, Daphnia magna

Maxiclene 400ml Aerosol

Acute toxicity - aquatic plants EL₅₀, 72 hours: >1000 mg/l, Pseudokirchneriella subcapitata

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOELR, 28 days: 0.173 mg/l, Oncorhynchus mykiss (Rainbow trout), Estimated value.

Chronic toxicity - aquatic invertebrates NOELR, 21 days: 1.22 mg/l, Daphnia magna, Estimated value.

Propan-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: 10000 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates LC₅₀, 24 hours: >10000 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 7 days: 1800 mg/l, Scenedesmus quadricauda

2-Aminoethanol

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

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 349 mg/l, Cyprinus carpio (Common carp)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 65 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 2.8 mg/l, Pseudokirchneriella subcapitata

Acute toxicity - microorganisms EC₁₀, 30 minutes: >1000 mg/l, Activated sludge

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOEC, 41 days: 1.24 mg/l, Oryzias latipes (Red killifish)

Chronic toxicity - aquatic invertebrates NOEC, 21 days: 0.85 mg/l, Daphnia magna

Fatty acids, C16-18 and C18-unsatd.

Toxicity No negative effects on the aquatic environment are known.

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

Toxicity Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting effects.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 1.67 mg/l, Lepomis macrochirus (Bluegill)

Maxiclene 400ml Aerosol

Acute toxicity - aquatic invertebrates	LC ₅₀ , 48 hours: 7.6 mg/l, Hyalella azteca
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 47.3 mg/l, Scenedesmus subspicatus
<u>Chronic aquatic toxicity</u>	
Chronic toxicity - fish early life stage	NOEC, 90 days: 0.25 mg/l, Tilapia mossambica
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 1.18 mg/l, Daphnia magna

Alcohol C9-11, ethoxylated

Toxicity	Based on available data the classification criteria are not met.
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hours: 57 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 2.5 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 96 hours: 1.4 mg/l, Selenastrum capricornutum

Benzyl-C12-14-alkyldimethylammonium chlorides

Toxicity	Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 Very toxic to aquatic life with long lasting effects.
<u>Acute aquatic toxicity</u>	
LE(C)₅₀	0.01 < L(E)C ₅₀ ≤ 0.1
M factor (Acute)	10
Acute toxicity - fish	LC ₅₀ , 96 hours: 0.85 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	LC ₅₀ , 48 hours: 0.32 mg/l, Acartia tonsa
Acute toxicity - aquatic plants	EC ₅₀ , 96 hours: 0.03 mg/l, Selenastrum capricornutum
<u>Chronic aquatic toxicity</u>	
M factor (Chronic)	1
Short term toxicity - embryo and sac fry stages	NOEC, 28 days: 0.032 mg/l, Pimephales promelas (Fat-head Minnow)
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 0.0045 mg/l, Daphnia magna

Sodium hydroxide

Toxicity	The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.
<u>Acute aquatic toxicity</u>	

Maxiclene 400ml Aerosol

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 40.4 mg/l, Ceriodaphnia dubia

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

Ethanol

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

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 14200 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates LC₅₀, 48 hours: 5012 mg/l, Ceriodaphnia dubia

Acute toxicity - aquatic plants EC₅₀, 72 hours: 11.5 mg/l, Chlorella vulgaris

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates NOEC, 9 days: 9.6 mg/l, Daphnia magna

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

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 aquatic toxicity

LE(C)₅₀ 0.01 < L(E)C₅₀ ≤ 0.1

M factor (Acute) 10

Acute toxicity - fish LC₅₀, 96 hours: 0.19 mg/l, Oncorhynchus mykiss (Rainbow trout)

Maxiclene 400ml Aerosol

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

12.2. Persistence and degradability

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

Ecological information on ingredients.

Water

Persistence and degradability The product contains only inorganic substances which are not biodegradable.

Petroleum gases, liquefied

Persistence and degradability The substance is readily biodegradable.

Biodegradation Water - Degradation 100%: 385.5 hours

2-Butoxyethanol

Persistence and degradability The substance is readily biodegradable.

Biodegradation Water - Degradation 90.4%: 28 days

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

Persistence and degradability Readily biodegradable but failing the 10-day window.

Biodegradation Water - Degradation ~5%: 3 days
Water - Degradation 69%: 28 days

Propan-2-ol

Persistence and degradability The substance is readily biodegradable.

Biodegradation Water - Degradation 53%: 5 days

Biological oxygen demand 1.19-1.72 g O₂/g substance

Chemical oxygen demand 2.23 g O₂/g substance

2-Aminoethanol

Phototransformation Water - DT₅₀ : 10.742 hours
Estimated value.

Biodegradation Water - Degradation >90%: 21 days

Maxiclene 400ml Aerosol

Fatty acids, C16-18 and C18-unsatd.

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

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

Persistence and degradability The substance is readily biodegradable.

Biodegradation Water - Degradation 85%: 29 days

Alcohol C9-11, ethoxylated

Persistence and degradability The substance is readily biodegradable.

Biodegradation Water - Degradation 72%: 28 days

Benzyl-C12-14-alkyldimethylammonium chlorides

Persistence and degradability The substance is readily biodegradable.

Phototransformation Water - DT₅₀ : 0.26 days

Stability (hydrolysis) pH4 - Recovery 94.6%: 30 days @ 25°C
pH7 - Recovery 94.4%: 30 days @ 25°C
pH9 - Recovery 99.5%: 30 days @ 25°C

Biodegradation Water - Degradation 95.5%: 28 days

(2-Hydroxyethyl)dimethyl[3-[(1-oxooctadecyl)amino]propyl]ammonium nitrate

Persistence and degradability No data available.

Sodium hydroxide

Persistence and degradability The product contains only inorganic substances which are not biodegradable.

Ethanol

Persistence and degradability The substance is readily biodegradable.

Biodegradation Water - Degradation 74%: 10 days

Chemical oxygen demand 1.99 g O₂/g substance

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

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

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)

Maxiclene 400ml Aerosol

Biodegradation Water - DT₅₀ : 0.2 - 1.3 days

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

Ecological information on ingredients.

Water

Bioaccumulative potential Not applicable.

Petroleum gases, liquefied

Bioaccumulative potential No data available on bioaccumulation.

2-Butoxyethanol

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Kow: 0.81

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

Partition coefficient Scientifically unjustified.

Propan-2-ol

Bioaccumulative potential Bioaccumulation is unlikely.

2-Aminoethanol

Bioaccumulative potential BCF: 2.3, Estimated value. Bioaccumulation is unlikely.

Partition coefficient log Pow: -1.91

Fatty acids, C16-18 and C18-unsatd.

Bioaccumulative potential No data available on bioaccumulation.

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

Bioaccumulative potential BCFs: 159, Palaemonetes varians

Partition coefficient log Pow: 1.4

Alcohol C9-11, ethoxylated

Bioaccumulative potential BCF: 12.7, Fish Bioaccumulation is unlikely.

Partition coefficient log Pow: 3.75

Benzyl-C12-14-alkyldimethylammonium chlorides

Bioaccumulative potential BCF: 67.62, Estimated value. Bioaccumulation is unlikely.

Partition coefficient log Pow: 2.75

Maxiclene 400ml Aerosol

(2-Hydroxyethyl)dimethyl[3-[(1-oxooctadecyl)amino]propyl]ammonium nitrate

Bioaccumulative potential No data available on bioaccumulation.

Sodium hydroxide

Bioaccumulative potential No data available on bioaccumulation.

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

Partition coefficient log Pow: 1.19

Ethanol

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: -0.35

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

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: -0.75

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

12.4. Mobility in soil

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

Ecological information on ingredients.

Water

Mobility Mobile.

Petroleum gases, liquefied

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

2-Butoxyethanol

Mobility The product is miscible with water and may spread in water systems.

Surface tension 29.53 mN/m @ 20°C

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

Mobility The product has poor water-solubility.

Propan-2-ol

Maxiclene 400ml Aerosol

Mobility The product is soluble in water.

2-Aminoethanol

Mobility The product is soluble in water.

Henry's law constant 0.000000118 Pa m³/mol @ 25°C

Fatty acids, C16-18 and C18-unsatd.

Mobility The product is insoluble in water.

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

Mobility The product is soluble in water.

Surface tension 29.3-31.8 mN/m @ 25°C

Alcohol C9-11, ethoxylated

Mobility The product is soluble in water.

Benzyl-C12-14-alkyldimethylammonium chlorides

Mobility The product is soluble in water.

Henry's law constant 0.00000104 Pa m³/mol @ 25°C Estimated value.

Surface tension 28.27 mN/m @ 19.7°C

(2-Hydroxyethyl)dimethyl[3-[(1-oxooctadecyl)amino]propyl]ammonium nitrate

Mobility No data available.

Sodium hydroxide

Mobility The product is soluble in water.

Ethanol

Mobility The product is soluble in water.

Surface tension 24.5 mN/m @ 20°C/68°F

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

Mobility No data available.

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.

12.5. Results of PBT and vPvB assessment

Ecological information on ingredients.

Water

Maxiclene 400ml Aerosol

Results of PBT and vPvB assessment Not applicable. Substance is inorganic.

Petroleum gases, liquefied

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

2-Butoxyethanol

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

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

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

Propan-2-ol

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

2-Aminoethanol

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

Fatty acids, C16-18 and C18-unsatd.

Results of PBT and vPvB assessment No data available.

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts

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

Alcohol C9-11, ethoxylated

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

Benzyl-C12-14-alkyldimethylammonium chlorides

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

(2-Hydroxyethyl)dimethyl[3-[(1-oxooctadecyl)amino]propyl]ammonium nitrate

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

Sodium hydroxide

Maxiclene 400ml Aerosol

Results of PBT and vPvB assessment Not applicable. Substance is inorganic.

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.

Ethanol

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.

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.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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 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. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

General For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.

14.1. UN number

UN No. (ADR/RID)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950
UN No. (ADN)	1950

Maxiclene 400ml Aerosol

14.2. UN proper shipping name

Proper shipping name (ADR/RID) AEROSOLS

Proper shipping name (IMDG) AEROSOLS

Proper shipping name (ICAO) AEROSOLS

Proper shipping name (ADN) AEROSOLS

14.3. Transport hazard class(es)

ADR/RID class 2.2

ADR/RID classification code 5A,5O

ADR/RID label 2.2

IMDG class 2.2

ICAO class/division 2.2

ADN class 2.2

Transport labels



14.4. Packing group

ADR/RID packing group None

IMDG packing group None

ADN packing group None

ICAO packing group None

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS F-D, S-U

ADR transport category 3

Tunnel restriction code (E)

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

Maxiclene 400ml Aerosol

National regulations	<p>Health and Safety at Work etc. Act 1974 (as amended).</p> <p>The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).</p> <p>The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].</p> <p>EH40/2005 Workplace exposure limits.</p> <p>The Aerosol Dispensers Regulations 2009 (SI 2009 No. 2824).</p>
EU legislation	<p>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).</p> <p>Commission Regulation (EU) No 453/2010 of 20 May 2010.</p> <p>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).</p> <p>Dangerous Preparations Directive 1999/45/EC.</p> <p>Dangerous Substances Directive 67/548/EEC.</p> <p>Council Directive of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers (75/324/EEC) (as amended).</p>

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Classification procedures according to Regulation (EC) 1272/2008	Aerosol 3 - H229: : Expert judgement.
Training advice	Read and follow manufacturer's recommendations. Only trained personnel should use this material.
Issued by	Emily Kirk
Revision date	09/03/2018
Revision	1
SDS number	203
Hazard statements in full	<p>H220 Extremely flammable gas.</p> <p>H222 Extremely flammable aerosol.</p> <p>H225 Highly flammable liquid and vapour.</p> <p>H229 Pressurised container: may burst if heated.</p> <p>H280 Contains gas under pressure; may explode if heated.</p> <p>H302 Harmful if swallowed.</p> <p>H304 May be fatal if swallowed and enters airways.</p> <p>H312 Harmful in contact with skin.</p> <p>H314 Causes severe skin burns and eye damage.</p> <p>H315 Causes skin irritation.</p> <p>H318 Causes serious eye damage.</p> <p>H319 Causes serious eye irritation.</p> <p>H332 Harmful if inhaled.</p> <p>H335 May cause respiratory irritation.</p> <p>H336 May cause drowsiness or dizziness.</p> <p>H400 Very toxic to aquatic life.</p> <p>H410 Very toxic to aquatic life with long lasting effects.</p>

Maxiclene 400ml Aerosol

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.