

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 Tox - Fly & Wasp killer

Container size 300mL

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

Identified uses Kills flying insects

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier Keen-Newport Group Limited
Unit 31, Kingfisher Court, Hambridge Road
Newbury, Berkshire
RG14 5JS

1.4. Emergency telephone number

Emergency telephone +44 (0)1635 34600 (Mon-Fri 09:00-17:00)

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 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements H222 Extremely flammable aerosol.
H229 Pressurised container: may burst if heated.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P102 Keep out of reach of children.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P211 Do not spray on an open flame or other ignition source.
 P251 Do not pierce or burn, even after use.
 P273 Avoid release to the environment.
 P260 Do not breathe spray.
 P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
 P501 Dispose of contents/ container in accordance with national regulations.

Supplementary precautionary Statements

P391 Collect spillage.

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**

butane 10-30% CAS number: 106-97-8 EC number: 203-448-7 REACH registration number: 01-2119474691-32-XXXX Contains no other substances or impurities which will influence the classification of the product.		
Classification Flam. Gas 1 - H220 Press. Gas (Liq.) - H280		Classification (67/548/EEC or 1999/45/EC) F+; R12. Extremely flammable.
isobutane 5-10% CAS number: 75-28-5 EC number: 200-857-2 REACH registration number: 01-2119485395-27-0000 Contains no other substances or impurities which will influence the classification of the product.		
Classification Flam. Gas 1 - H220 Press. Gas (Liq.) - H280		Classification (67/548/EEC or 1999/45/EC) F+; R12. Extremely flammable.
1,3-dipropylcyclohexane; 2-methylundecane; undecane 5-10% CAS number: — EC number: 926-141-6 REACH registration number: 01-2119456620-43-XXXX		
Classification Asp. Tox. 1 - H304		
propane 5-10% CAS number: 74-98-6 EC number: 200-827-9 REACH registration number: 01-2113486944-21-0000 Contains no other substances or impurities which will influence the classification of the product.		
Classification Flam. Gas 1 - H220 Press. Gas (Liq.) - H280		Classification (67/548/EEC or 1999/45/EC) F+; R12. Extremely flammable.

2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether			<1%
CAS number: 51-03-6	EC number: 200-076-7	REACH registration number: 01-2119918969-16-XXXX	
M factor (Acute) = 1	M factor (Chronic) = 1		
Classification Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410			

Tetramethrin			<1%
CAS number: 7696-12-0	EC number: 231-711-6		
M factor (Acute) = 10	M factor (Chronic) = 1		
Classification Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410			

permethrin (ISO)			<1%
CAS number: 52645-53-1	EC number: 258-067-9		
M factor (Acute) = 1000	M factor (Chronic) = 1000		
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Sens. 1 - H317 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410			

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist.
Ingestion	Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.
Skin contact	Rinse with water.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues.
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	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.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	The product is 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. Bursting aerosol containers may be propelled from a fire at high speed. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. Vapours may form explosive mixtures with air.
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. Avoid discharge to the aquatic environment. 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 Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material. Evacuate area. Risk of explosion. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Promptly remove any clothing that becomes contaminated.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment.

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. Eliminate all ignition sources if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Under normal conditions of handling and storage, spillages from aerosol containers are unlikely. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. Small Spillages: Wipe up with an absorbent cloth and dispose of waste safely. Large 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. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. For waste disposal, see Section 13.

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. The product is flammable. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. 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 reuse empty containers. 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.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store away from incompatible materials (see Section 10). Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs. Keep away from oxidising materials, heat and flames. 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.

Storage class Miscellaneous hazardous material storage.

7.3 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

butane

Long-term exposure limit (8-hour TWA): WEL 600 ppm 1450 mg/m³

Short-term exposure limit (15-minute): WEL 750 ppm 1810 mg/m³

isobutane

800ppm (TWA/TLV)

propane

TLV (ACGHIH) - 1.000 ppm

WEL = Workplace Exposure Limit

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation.

Eye/face protection

Avoid contact with eyes. Large Spillages: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

Hand protection

No specific hand protection recommended. Avoid contact with skin.

Hygiene measures

Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

Respiratory protection

No specific recommendations. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.

Environmental exposure controls

Keep container tightly sealed when not in use. Avoid release to the environment.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	Colourless.
Odour	Characteristic.
pH	pH (concentrated solution): 7
Melting point	No information available.
Initial boiling point and range	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Vapour pressure	No information available.
Vapour density	No information available.

Relative density	
Solubility(ies)	No information available.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	No information available.
Explosive under the influence of a flame	No information available.
Oxidising properties	Yes
	Not available.

9.2. Other information Other information

No information required.

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 The following materials may react strongly with the product: Oxidising agents.

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.

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

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	
Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation	
Skin sensitisation	Based on available data the classification criteria are not met.
Germ cell mutagenicity	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Carcinogenicity	
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.
Reproductive toxicity	
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.
Specific target organ toxicity - single exposure	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
Specific target organ toxicity - repeated exposure	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
Aspiration hazard	
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.

Toxicological information on ingredients.

butane

Acute toxicity - oral	
Notes (oral LD₅₀)	Technically not feasible.
Acute toxicity - dermal	
Notes (dermal LD₅₀)	Technically not feasible.
Acute toxicity – inhalation	

Acute toxicity inhalation (LC₅₀ vapours mg/l)	1,443.0
Species	Rat
ATE inhalation (vapours mg/l)	1,443.0
Skin corrosion/irritation Skin corrosion/irritation	Technically not feasible.
Serious eye damage/irritation Serious eye damage/irritation	Technically not feasible.
Respiratory sensitisation Respiratory sensitisation	Data lacking.
Skin sensitisation Skin sensitisation	Technically not feasible.
Germ cell mutagenicity Genotoxicity - in vitro Genotoxicity - in vivo	Negative. Negative.
Carcinogenicity Carcinogenicity	Data lacking.
isobutane	
Acute toxicity - oral Notes (oral LD₅₀)	Technically not feasible.
Acute toxicity - dermal Notes (dermal LD₅₀)	Technically not feasible.
Acute toxicity - inhalation Acute toxicity inhalation (LC₅₀ gases ppmV)	800,000.0
Species	Rat
ATE inhalation (gases ppm)	800,000.0
Skin corrosion/irritation Skin corrosion/irritation	Technically not feasible.
Serious eye damage/irritation Serious eye damage/irritation	Technically not feasible.
Respiratory sensitisation Respiratory sensitisation	Data lacking.
Skin sensitisation	

Skin sensitisation	Technically not feasible.
Germ cell mutagenicity	
Genotoxicity - in vitro	Negative.
Genotoxicity - in vivo	Negative.
Carcinogenicity	
Carcinogenicity	There is no evidence that the product can cause cancer.
Specific target organ toxicity - single exposure	
STOT - single exposure	Not classified
Specific target organ toxicity - repeated exposure	
STOT - repeated exposure	Not classified
Inhalation	Irregular cardiac activity.
	1,3-dipropylcyclohexane; 2-methylundecane; undecane
Acute toxicity - oral	
Notes (oral LD₅₀)	LD ₅₀ >5000 mg/kg, Oral, Rat
Acute toxicity - dermal	
Notes (dermal LD₅₀)	LD ₅₀ >2000 mg/kg, Dermal, Rat
Acute toxicity - inhalation	
Notes (inhalation LC₅₀)	LC ₅₀ >5000 mg/m ³ , Inhalation, Rat
Skin corrosion/irritation	
Skin corrosion/irritation	Not irritating.
Animal data	Erythema/eschar score: Well defined erythema (2). Fully reversible within 14 days.
Serious eye damage/irritation	
Serious eye damage/irritation	Conjunctivae score: 0 Not irritating
Skin sensitisation	
Skin sensitisation	Not sensitising.
Germ cell mutagenicity	
Genotoxicity - in vitro	Gene mutation: Negative.
Genotoxicity - in vivo	Chromosome aberration: Negative.
Aspiration hazard	
Aspiration hazard	May be fatal if swallowed and enters airways.
	Propane
Acute toxicity - oral	
Notes (oral LD₅₀)	Technically not feasible.
Acute toxicity – dermal	

Notes (dermal LD ₅₀)	Technically not feasible.
Acute toxicity - inhalation Acute toxicity inhalation (LC ₅₀ vapours mg/l)	1,443.0
Species	Rat
ATE inhalation (vapours mg/l)	1,443.0
Skin corrosion/irritation Skin corrosion/irritation	Technically not feasible.
Serious eye damage/irritation Serious eye damage/irritation	Technically not feasible.
Respiratory sensitisation Respiratory sensitisation	Data lacking.
Skin sensitisation Skin sensitisation	Technically not feasible.
Germ cell mutagenicity Genotoxicity - in vitro Genotoxicity - in vivo	Negative. Negative.
Carcinogenicity Carcinogenicity	There is no evidence that the product can cause cancer.
Reproductive toxicity Reproductive toxicity - fertility	Screening - NOAEC 3.000 ppm, Inhalation, Rat
Reproductive toxicity - development	Developmental toxicity: - NOAEC: 9.000 ppm, Inhalation,
2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether	
Acute toxicity - oral Acute toxicity oral (LD ₅₀ mg/kg)	5,630.0
Species	Rat
ATE oral (mg/kg)	5,630.0
Acute toxicity - dermal Notes (dermal LD ₅₀)	LD ₅₀ >2000 mg/kg, Dermal, Rabbit
Acute toxicity - inhalation Notes (inhalation LC ₅₀)	LC50 5.9 mg/l, Inhalation, Rat
Skin corrosion/irritation Skin corrosion/irritation	Not irritating.

Serious eye damage/irritation Serious eye damage/irritation	Cornea score: 1.67 Not irritating
Skin sensitisation Skin sensitisation	Not sensitising.
Germ cell mutagenicity Genotoxicity - in vitro Genotoxicity - in vivo	Gene mutation: Negative. Chromosome aberration: Negative.
Carcinogenicity Carcinogenicity	NOAEL >=30 ppm, Oral, Rat Based on available data the classification criteria are not met.
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
Tetramethrin	
Acute toxicity - oral Acute toxicity oral (LD₅₀ mg/kg)	4,640.0
Species	Rat
ATE oral (mg/kg)	4,640.0
Acute toxicity - dermal Notes (dermal LD₅₀)	LD ₅₀ >2500 mg/kg, Dermal, Rat
Acute toxicity - inhalation Notes (inhalation LC₅₀)	LC50 >2500 mg/m ³ , Inhalation, Rat
Skin corrosion/irritation Skin corrosion/irritation	May be slightly irritating to skin.
Serious eye damage/irritation Serious eye damage/irritation	Irritation of eyes is assumed.
Respiratory sensitisation Respiratory sensitisation	May cause sensitisation or allergic reactions in sensitive individuals.
Carcinogenicity IARC carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
permethrin (ISO)	
Acute toxicity - oral Acute toxicity oral (LD₅₀ mg/kg)	383.0
Species	Rat
ATE oral (mg/kg)	383.0

Acute toxicity - dermal	
Acute toxicity dermal (LD₅₀ mg/kg)	6,600.0
Species	Rat
ATE dermal (mg/kg)	6,600.0
Acute toxicity - inhalation	
Notes (inhalation LC₅₀)	LC50 >23.5 mg/l, Inhalation, Rat Manufactures or importers must apply at least this minimum classification, but must classify in a more severe hazard category in the event that information is available which shows that the hazard(s) meet the criteria for classification in the more severe category.
Skin corrosion/irritation	
Skin corrosion/irritation	May cause skin irritation.
Serious eye damage/irritation	
Serious eye damage/irritation	Not available.
Skin sensitisation	
Skin sensitisation	Sensitising.
Carcinogenicity	
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.

SECTION 12: Ecological Information

12.1. Toxicity

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

Ecological information on ingredients.

	Butane
Acute aquatic toxicity	
Acute toxicity - fish	LC ₅₀ , 96 hours: 49.9 mg/l, Fish
Acute toxicity – aquatic invertebrates	LC ₅₀ , 48 hours: 69.43 mg/l, Daphnia magna
Acute toxicity – aquatic plants	EC ₅₀ , 96 hours: 19.37 mg/l, Algae
	isobutene
Toxicity	The product is not believed to present a hazard due to its physical nature.
Acute aquatic toxicity	
Acute toxicity - fish	LC ₅₀ , 96 hours: 49.9 mg/l, Fish
Acute toxicity – aquatic invertebrates	LC ₅₀ , 48 hours: 69.43 mg/l, Daphnia magna
Acute toxicity – aquatic plants	EC ₅₀ , 96 hours: 19.37 mg/l, Algae

1,3-dipropylcyclohexane; 2-methylundecane; undecane	
Acute aquatic toxicity Acute toxicity - fish	LL ₅₀ , 24 hours: >1000 mg/l, Oncorhynchus mykiss (Rainbow trout)
Propane	
Acute aquatic toxicity Acute toxicity - fish	LC ₅₀ , 96 hours: 49.9 mg/l, Fish
Acute toxicity – aquatic Invertebrates	LC ₅₀ , 48 hours: 69.43 mg/l, Daphnia magna
Acute toxicity – aquatic plants	EC ₅₀ , 96 hours: 19.37 mg/l, Algae
2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether	
Acute aquatic toxicity	
LE(C) ₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC ₅₀ , 96 hours: 3.94 mg/l, Cyprinodon variegatus (Sheepshead minnow)
Acute toxicity – aquatic invertebrates	EC ₅₀ , 48 hours: 1.007 mg/l, Daphnia magna
Chronic aquatic toxicity NOEC	0.01 < NOEC ≤ 0.1
Degradability	Non-rapidly degradable
M factor (Chronic)	1
Chronic toxicity - fish early life stage	NOEC, 35 days: 0.18 mg/l, Pimephales promelas (Fat-head Minnow)
Tetramethrin	
Acute aquatic toxicity LE(C) ₅₀	0.01 < L(E)C ₅₀ ≤ 0.1
M factor (Acute)	10
Chronic aquatic toxicity NOEC	0.01 < NOEC ≤ 0.1
Degradability	Non-rapidly degradable
M factor (Chronic)	1
permethrin (ISO)	
Acute aquatic toxicity M factor (Acute)	1000
Acute toxicity - fish	LC ₅₀ , 96 hours: 0.016 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity – aquatic invertebrates	EC ₅₀ , 48 hours: 0.32 mg/l, Daphnia magna
Chronic aquatic toxicity M factor (Chronic)	1000

12.2. Persistence and degradability

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

Ecological information on ingredients.

Butane

Phototransformation	Air - DT ₅₀ : 1906 days
Biodegradation	Water - Degradation 100: 385.5 hours

Isobutene

Persistence and degradability	Not applicable.
Biodegradation	Water - Half-life 100: 6,9 days

1,3-dipropylcyclohexane; 2-methylundecane; undecane

Biodegradation	The substance is readily biodegradable.
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Propane

Phototransformation	Air - DT ₅₀ : 1906 days
Biodegradation	Water - Degradation 100: 385.5 hours

2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether

Persistence and degradability	Not readily biodegradable.
Phototransformation	Air - Degradation 50: 3.6 hours
Biodegradation	Not inherently biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

Butane

Bioaccumulative potential	The product does not contain any substances expected to be bioaccumulating.
Partition coefficient	log Pow: 2,89

Isobutene

Bioaccumulative potential	Because of the low log k _{ow} , accumulation in organisms is not to be expected.
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Partition coefficient log Pow: ~ 2,76

Propane

Bioaccumulative potential Because of the low log kow, accumulation in organisms is not to be expected.

Partition coefficient log Pow: ~ 3

permethrin (ISO)

Bioaccumulative potential BCF: 3620,

12.4. Mobility in soil

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

Ecological information on ingredients.

Butane

Mobility No data.

Isobutene

Mobility No data.

Propane

Mobility No data.

12.5. Results of PBT and vPvB assessment

Ecological information on ingredients.

Butane

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

isobutene

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

1,3-dipropylcyclohexane; 2-methylundecane; undecane

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

propane

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether

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

permethrin (SIO)

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. 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. Empty containers must not be punctured or incinerated because of the risk of an explosion. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

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

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 2.1

ADR/RID classification code 5F

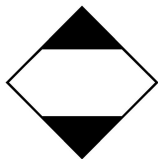
ADR/RID label 2.1

IMDG class 2.1

ICAO class/division 2.1

ADN class 2.1

Transport labels



14.4. Packing group

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 2

Tunnel restriction code (D)

14.7. Transport in bulk according to Annex II of MARPOL 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.
The Aerosol Dispensers Regulations 2009 (SI 2009 No. 2824).

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).
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).

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**

Aerosol = Aerosol
Aquatic Acute = Hazardous to the aquatic environment (acute)
Aquatic Chronic = Hazardous to the aquatic environment (chronic)

**Classification procedures
according to Regulation (EC)
1272/2008**

Aquatic Acute 1 - H400: Aquatic Chronic 1 - H410: : Calculation method. Aerosol 1 - H222, H229: : Expert judgement.

Training advice

Read and follow manufacturer's recommendations.

Revision date

11/04/2018

Revision

1

SDS number

4868

Hazard statements in full

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H229 Pressurised container: may burst if heated.
H280 Contains gas under pressure; may explode if heated.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H317 May cause an allergic skin reaction.
H332 Harmful 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.