SAFETY DATA SHEET
ODOURKILL

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

1.1. Product identifier

Product name ODOURKILL

Internal identification L938

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

Identified uses Air reodourant.

1.3. Details of the supplier of the safety data sheet

Supplier
NIELSEN CHEMICALS
RAWDON ROAD
MOIRA
SWADLINCOTE
DERBYSHIRE
DE12 6DA
info@nielsenchemicals.com
TEL: +44 (0) 1283 222277
FAX: +44 (0) 1283 225731

1.4. Emergency telephone number

Emergency telephone +44 (0) 777 8505 330 (24 hrs). +44 (0) 1865 407333 (24 hrs). MEDICAL AND ENVIRONMENTAL EMERGENCIES ONLY.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Eye Dam. 1 - H318

Environmental hazards Aquatic Chronic 3 - H412

Classification (67/548/EEC or 1999/45/EC) Xi;R36. R52/53.

2.2. Label elements

Pictogram

Signal word Danger

Hazard statements
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.
EUH208 Contains d-LIMONENE, 4-TERTIARY-BUTYLCYCLOHEXYL ACETATE, TERPINOLENE, PIN-2(3)-ENE;2,6,6-TRIMETHYLBICYCLO[3.1.1]HEPT-2-ENE, COUMARIN, CITRAL, METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6. May produce an allergic reaction.

Precautionary statements
P273 Avoid release to the environment.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/ doctor.
P501 Dispose of contents/ container in accordance with national regulations.
P280 Wear protective gloves, eye and face protection.

Contains
ISOTRIDECANOL ETHOXYLATE (EO 3 - 5)

Detergent labelling
5 - < 15% non-ionic surfactants, 5 - < 15% perfumes, < 5% anionic surfactants, Contains d-LIMONENE, 4-TERTIARY-BUTYLCYCLOHEXYL ACETATE, TERPINOLENE, COUMARIN, CITRAL, CITRONELLAL, METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6

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

ISOTRIDECANOL ETHOXYLATE (EO 3 - 5) **5-10%**

CAS number: 24938-91-8

Classification	**Classification (67/548/EEC or 1999/45/EC)**
Eye Dam. 1 - H318	Xi;R41.

TERPINEOL **1-5%**

CAS number: 8000-41-7 EC number: 232-268-1 REACH registration number: 01-2119553062-49-xxxx

Classification	**Classification (67/548/EEC or 1999/45/EC)**
Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Xi;R36/38.

d-LIMONENE **<1%**

CAS number: 5989-27-5 EC number: 227-813-5

M factor (Acute) = 1 M factor (Chronic) = 1

Classification	**Classification (67/548/EEC or 1999/45/EC)**
Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Asp. Tox. 1 - H304 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	R10 R43 Xi;R38 N;R50/53

PROPAN-2-OL <1%

CAS number: 67-63-0 EC number: 200-661-7 REACH registration number: 01-2119457558-25-xxxx

Classification	**Classification (67/548/EEC or 1999/45/EC)**
Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	F;R11 Xi;R36 R67

4-TERTIARY-BUTYLCYCLOHEXYL ACETATE <1%

CAS number: 32210-23-4 EC number: 250-954-9

Classification	**Classification (67/548/EEC or 1999/45/EC)**
Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	N;R51/53.

TERPINOLENE <1%

CAS number: 586-62-9 EC number: 209-578-0

M factor (Chronic) = 1

Classification	**Classification (67/548/EEC or 1999/45/EC)**
Flam. Liq. 3 - H226 Skin Sens. 1 - H317 Asp. Tox. 1 - H304 Aquatic Chronic 1 - H410	Xn;R65. N;R51/53.

PIN-2(3)-ENE;2,6,6-TRIMETHYLBICYCLO[3.1.1]HEPT-2-ENE <1%

CAS number: 80-56-8

Classification	**Classification (67/548/EEC or 1999/45/EC)**
Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Asp. Tox. 1 - H304	Xn;R65. Xi;R38. R10,R43.

COUMARIN <1%

CAS number: 91-64-5 EC number: 202-086-7

Classification	**Classification (67/548/EEC or 1999/45/EC)**
Acute Tox. 4 - H302 Skin Sens. 1 - H317	Xn;R22,R48/22. R43.

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CITRAL	**<1%**
CAS number: 5392-40-5	EC number: 226-394-6
Classification	**Classification (67/548/EEC or 1999/45/EC)**
Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317	R43 Xi;R38

CITRONELLAL	**<1%**
CAS number: 106-23-0	EC number: 203-376-6
Classification	**Classification (67/548/EEC or 1999/45/EC)**
Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317	Xi;R38. N;R51/53. R43.

METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6	**<1%**
CAS number: 55965-84-9	
M factor (Acute) = 10	M factor (Chronic) = 10
Classification	**Classification (67/548/EEC or 1999/45/EC)**
Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	T;R23/24/25 C;R34 R43 N;R50/53

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

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

Ingestion Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention.

Skin contact Rinse with water. Get medical attention if irritation persists after washing.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately.

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

Inhalation Coughing, chest tightness, feeling of chest pressure.

Ingestion May cause discomfort if swallowed.

Skin contact Prolonged contact may cause dryness of the skin. May cause skin sensitisation or allergic reactions in sensitive individuals.

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Eye contact	May cause serious eye damage.

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	Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO_2). Carbon monoxide (CO).

5.3. Advice for firefighters

Protective actions during firefighting	No specific firefighting precautions known.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Take care as floors and other surfaces may become slippery. Do not touch or walk into spilled material. Avoid contact with skin, eyes and clothing. Provide adequate ventilation. Avoid contact with contaminated tools and objects. Wash thoroughly after dealing with a spillage.

6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground. Harmful to aquatic life with long lasting effects.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Avoid the spillage or runoff entering drains, sewers or watercourses. Provide adequate ventilation. Absorb spillage with inert, damp, non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

Reference to other sections	Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Wear protective gloves, eye and face protection. Avoid contact with skin, eyes and clothing. Provide adequate ventilation. Avoid breathing spray. Avoid release to the environment. Do not reuse empty containers. Do not use in paint spraying equipment. Do not empty into drains. Do not eat, drink or smoke when using this product. Wash skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Store at temperatures between 4°C and 40°C.
Storage class	Corrosive storage.

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7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

PROPAN-2-OL

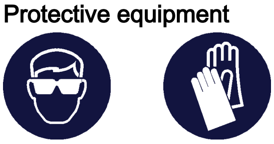
Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m^3
Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m^3
WEL = Workplace Exposure Limit

PROPAN-2-OL (CAS: 67-63-0)

DNEL	Industry - Dermal; Long term systemic effects: 888 mg/kg/day Industry - Inhalation; Long term systemic effects: 500 mg/m^3 Consumer - Dermal; Long term systemic effects: 319 mg/kg/day Consumer - Oral; Long term systemic effects: 26 mg/kg/day Consumer - Inhalation; Long term systemic effects: 89 mg/m^3
PNEC	- Fresh water; 140.9 mg/l - Marine water; 140.9 mg/l - Intermittent release; 140.9 mg/l - Sediment (Freshwater); 552 mg/kg - Sediment (Marinewater); 552 mg/kg - STP; 2251 mg/l - Soil; 28 mg/kg

8.2. Exposure controls

Protective equipment



Eye/face protection Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

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. The selected gloves should have a breakthrough time of at least 4 hours. The breakthrough time for any glove material may be different for different glove manufacturers. When used with mixtures, the protection time of gloves cannot be accurately estimated. 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. For exposure up to 4 hours, wear gloves made of the following material: Rubber (natural, latex). Thickness: 0.48 mm Neoprene. Thickness: 0.46 mm Nitrile rubber. Thickness: 0.28 mm

Hygiene measures Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	White/off-white.
Odour	Pleasant, agreeable.
pH	pH (concentrated solution): 7.0
Relative density	0.995 @ 20°C
Solubility(ies)	Completely soluble in water.

9.2. Other information

Other information	Not determined.

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.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not determined.

10.4. Conditions to avoid

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

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhalation	Coughing, chest tightness, feeling of chest pressure.
Ingestion	May cause discomfort.
Skin contact	Prolonged contact may cause dryness of the skin. May cause skin sensitisation or allergic reactions in sensitive individuals.
Eye contact	Causes serious eye damage.

Toxicological information on ingredients.

PROPAN-2-OL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	4,700.0

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Species	Rat
ATE oral (mg/kg)	4,700.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	16.4
Species	Rabbit

TERPINOLENE

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	4,390.0
Species	Rat
ATE oral (mg/kg)	4,390.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	4,300.0
Species	Rabbit
ATE dermal (mg/kg)	4,300.0

COUMARIN

Acute toxicity - oral

ATE oral (mg/kg)	500.0

CITRAL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	4,960.0
Species	Rat
ATE oral (mg/kg)	4,960.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,250.0
Species	Rabbit
ATE dermal (mg/kg)	2,250.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	680.0
Species	Rat
ATE inhalation (vapours mg/l)	680.0

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CITRONELLAL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	2,872.0
Species	Rat
ATE oral (mg/kg)	2,872.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,500.0
Species	Rat
ATE dermal (mg/kg)	2,500.0

METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	53.0
Species	Rat
Notes (oral LD_{50})	Estimated value.
ATE oral (mg/kg)	53.0

Acute toxicity - dermal

ATE dermal (mg/kg)	300.0

Acute toxicity - inhalation

ATE inhalation (vapours mg/l)	3.0

Skin sensitisation

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

SECTION 12: Ecological Information

Ecotoxicity	Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

PROPAN-2-OL

Ecotoxicity	The product is not expected to be toxic to aquatic organisms.

12.1. Toxicity

Acute toxicity - fish	Not determined.

Ecological information on ingredients.

ISOTRIDECANOL ETHOXYLATE (EO 3 - 5)

Acute toxicity - fish	LC_{50}, 96 hours: 1 - 10 mg/l mg/l, Fish

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Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 1 -10 mg/l mg/l, Daphnia magna

PROPAN-2-OL

Toxicity	Not considered toxic to fish.
Acute toxicity - fish	LC50, 96 hours: 9640 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC_{50}, : 9714 mg/l, Daphnia magna EC_{50}, 48 hours: >100 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: > 100 mg/l, Scenedesmus subspicatus IC_{50}, 72 hours: >100 mg/l, Algae

TERPINOLENE

Chronic aquatic toxicity

M factor (Chronic)	1

METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6

Acute aquatic toxicity

$LE(C)_{50}$	$0.01 < L(E)C50 \leq 0.1$
M factor (Acute)	10
Acute toxicity - fish	Estimated value. LC_{50}, 96 hours: 13 mg/l, Fish

Chronic aquatic toxicity

NOEC	$0.001 < NOEC \leq 0.01$
Degradability	Non-rapidly degradable
M factor (Chronic)	10

12.2. Persistence and degradability

Persistence and degradability The product is expected to be biodegradable.

Ecological information on ingredients.

PROPAN-2-OL

Persistence and degradability	The product is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Ecological information on ingredients.

PROPAN-2-OL

Bioaccumulative potential	The product is not bioaccumulating.

12.4. Mobility in soil

Mobility The product is soluble in water.

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Ecological information on ingredients.

PROPAN-2-OL

Mobility The product is soluble in water.

12.5. Results of PBT and vPvB assessment

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

Ecological information on ingredients.

PROPAN-2-OL

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.

Ecological information on ingredients.

PROPAN-2-OL

Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods 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.

SECTION 14: Transport information

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

Special Provisions note

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Transport labels

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

Not applicable.

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

SECTION 15: Regulatory information

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

National regulations	Control of Substances Hazardous to Health Regulations 2002 (as amended).
EU legislation	Commission Regulation (EU) No 453/2010 of 20 May 2010. 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).
Guidance	Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	ATE: Acute Toxicity Estimate. ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. CAS: Chemical Abstracts Service. DNEL: Derived No Effect Level. IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods. PBT: Persistent, Bioaccumulative and Toxic substance. PNEC: Predicted No Effect Concentration. vPvB: Very Persistent and Very Bioaccumulative. NOEC: No Observed Effect Concentration.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	02/09/2016
Revision	3.2
Supersedes date	22/04/2015
Risk phrases in full	R10 Flammable. R11 Highly flammable. R35 Causes severe burns. R36 Irritating to eyes. R36/38 Irritating to eyes and skin. R38 Irritating to skin. R41 Risk of serious damage to eyes. R43 May cause sensitisation by skin contact. R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R65 Harmful: may cause lung damage if swallowed. R67 Vapours may cause drowsiness and dizziness.

ODOURKILL

Hazard statements in full

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
EUH208 Contains d-LIMONENE, 4-TERTIARY-BUTYLCYCLOHEXYL ACETATE, TERPINOLENE, PIN-2(3)-ENE;2,6,6-TRIMETHYLBICYCLO[3.1.1]HEPT-2-ENE, COUMARIN, CITRAL, METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6. May produce an allergic reaction.