



Roadcrew Range All Seasons Screenwash

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

1.1. Product identifier	
Product name	ROADCREW RANGE ALL SEASONS SCREENWASH
Product number(s)	RCH0011, RCH0012, RCH0013, RCH0014
1.2. Relevant identified uses of the substance or mixture and uses advised against	
Identified uses	All purpose automotive windscreen cleaner
Uses advised against	This product is not recommended for any industrial, professional or consumer use other than the identified uses stated above.
1.3. Details of the supplier of the safety data sheet	
Supplier	Roadcrew Wedgnock Lane Warwick CV34 5YA 0845 600 9675
1.4. Emergency telephone number	
Emergency telephone	As Above - Opening Hours 9 am - 4 pm (Monday - Friday)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture	
Classification	
Physical hazards	Flam. Liq. 3 - H226
Health hazards	STOT SE 2 - H371
Environmental hazards	Not Classified
Classification (67/548/EEC or 1999/45/EC)	Xn;R20/21/22,R68/20/21/22. R10.
2.2. Label elements	
Pictogram	
Signal word	Warning
Hazard statements	H226 Flammable liquid and vapour. H371 May cause damage to organs.

Precautionary statements	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P233 Keep container tightly closed.</p> <p>P240 Ground/bond container and receiving equipment.</p> <p>P241 Use explosion-proof electrical equipment.</p> <p>P242 Use only non-sparking tools.</p> <p>P243 Take precautionary measures against static discharge.</p> <p>P260 Do not breathe vapour/spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P270 Do not eat, drink or smoke when using this product.</p> <p>P280 Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P308+P311 IF exposed or concerned: Call a POISON CENTER or doctor.</p> <p>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/container in accordance with national regulations.</p> <p>P102 Keep out of reach of children.</p>
Contains	METHANOL
Detergent labelling	< 5% perfumes, Contains BENZISOTHIAZOLINONE
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

METHANOL 5-10%	<p>CAS number: 67-56-1</p> <p>EC number: 200-659-6</p> <p>REACH registration number: 01-2119433307-44-XXXX</p>
Classification	<p>Flam. Liq. 2 - H225</p> <p>Acute Tox. 3 - H301</p> <p>Acute Tox. 3 - H311</p> <p>Acute Tox. 3 - H331</p> <p>STOT SE 1 - H370</p>
Classification (67/548/EEC or 1999/45/EC)	F;R11 T;R23/24/25,R39/23/24/25
2-BUTOXYETHANOL <1%	<p>CAS number: 111-76-2</p> <p>EC number: 203-905-0</p> <p>REACH registration number: 01-2119475108-36-XXXX</p>
Classification	<p>Acute Tox. 4 - H302</p> <p>Acute Tox. 4 - H312</p> <p>Acute Tox. 4 - H332</p> <p>Skin Irrit. 2 - H315</p> <p>Eye Irrit. 2 - H319</p>
Classification (67/548/EEC or 1999/45/EC)	Xn;R20/21/22 Xi;R36/38
PROPYLENE GLYCOL <1%	<p>CAS number: 57-55-6</p> <p>EC number: 200-338-0</p> <p>REACH registration number: 01-2119456809-23-XXXX</p>
Classification	Not Classified
Classification (67/548/EEC or 1999/45/EC)	–

2,6-DIMETHYL-7-OCTEN-2-OL <1%	CAS number: 18479-58-8 EC number: 242-362-4 REACH registration number: 01-2119457274-37-XXXX
Classification	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319
Classification (67/548/EEC or 1999/45/EC)	Xi;R36/38.
SODIUM HYDROXIDE <1%	CAS number: 1310-73-2 EC number: 215-185-5 REACH registration number: 01-2119457892-27-XXXX
Classification	Met. Corr. 1 - H290 Skin Corr. 1A - H314 Eye Dam. 1 - H318
Classification (67/548/EEC or 1999/45/EC)	C;R35
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	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Never give anything by mouth to an unconscious person. Get medical attention if any discomfort continues.
Inhalation	Remove affected person from source of contamination. Keep affected person away from heat, sparks and flames. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Never give anything by mouth to an unconscious person. Do not induce vomiting. Get medical attention immediately.
Skin contact	Remove affected person from source of contamination. Immediately remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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	In the unlikely event of over exposure to organic solvent vapours from this product, symptoms which may develop include headache, fatigue, dizziness and nausea.
Ingestion	Ingestion of large amounts may result in unconsciousness, blindness and death.
Skin contact	Skin irritation.
Eye contact	May cause temporary eye irritation.

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

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media suitable for the surrounding fire. Extinguish with the following media: Alcohol-resistant foam. Carbon dioxide (CO ₂). Water spray, fog or mist. Dry chemicals, sand, dolomite etc.
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	Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO ₂). May explode when heated or when exposed to flames or sparks. Solvent vapours may form explosive mixtures with air. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. May form explosive or toxic mixtures with air. Vapour explosion and poison hazard indoors, outdoors and in sewers.
Hazardous combustion products	Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting	Cool containers exposed to flames with water until well after the fire is out.
Special protective equipment for firefighters	Wear chemical protective suit. Use air-supplied respirator, gloves and protective goggles.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure suitable respiratory protection is worn during removal of spillages in confined areas. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. In case of spills, beware of slippery floors and surfaces. Take precautionary measures against static discharges. No smoking, sparks, flames or other sources of ignition near spillage.
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6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
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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. Stop leak if possible without risk. DO NOT touch spilled material! Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses. Cover large spillages with alcohol-resistant foam. Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.
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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. For waste disposal, see Section 13.
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SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Handling requirements	Avoid spilling. Keep away from heat, sparks and open flame. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. During application and drying, solvent vapours will be emitted. Avoid contact with skin and eyes.
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7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from oxidising materials, heat and flames. May attack some plastics, rubber and coatings. Take precautionary measures against static discharges.
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Storage class	Flammable liquid 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.
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SECTION 8: Exposure Controls/personal protection**8.1. Control parameters****Occupational exposure limits**

METHANOL	Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m ³ Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m ³ Long-term exposure limit (8-hour TWA): 2006/15/EC 200 ppm 260 mg/m ³ Sk
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2-BUTOXYETHANOL	Long-term exposure limit (8-hour TWA): WEL 25 ppm 123 mg/m ³ Short-term exposure limit (15-minute): WEL 50 ppm 246 mg/m ³ Sk
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PROPYLENE GLYCOL	Long-term exposure limit (8-hour TWA): WEL 474 mg/m ³ 150 ppm particulate vapour Long-term exposure limit (8-hour TWA): WEL 10 mg/m ³ particulate
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2,6-DIMETHYL-7-OCTEN-2-OL	No exposure limit value known.
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SODIUM HYDROXIDE	Short-term exposure limit (15-minute): WEL 2 mg/m ³
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WEL = Workplace Exposure Limit

Sk = Can be absorbed through skin.

Sk = Can be absorbed through the skin.

METHANOL (CAS: 67-56-1)

DNEL	Industry - Dermal; Short term Acute: 40 mg/kg bw/day Industry - Dermal; Long term systemic effects: 40 mg/kg bw/day Industry - Inhalation; Short term Acute: 260 mg/m ³ Industry - Inhalation; Long term systemic effects: 260 mg/m ³ Consumer - Dermal; Short term Acute: 8 mg/kg bw/day Consumer - Dermal; Long term systemic effects: 8 mg/kg bw/day Consumer - Inhalation; Long term systemic effects: 50 mg/m ³ Industry - Inhalation; Short term Acute: 260 mg/m ³ Industry - Inhalation; Long term local effects: 260 mg/m ³ Consumer - Inhalation; Short term Acute: 50 mg/m ³ Consumer - Inhalation; Long term local effects: 50 mg/m ³
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PNEC	- Fresh water; 20.8 mg/l - Marine water; 2.08 mg/l - Soil; 3.18 mg/kg soil dw - STP; 100 mg/l - Sediment (Freshwater); 77 mg/kg sediment dw - Intermittent release; 1540 mg/l - Sediment (Marinewater); 7.7 mg/kg sediment dw
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2-BUTOXYETHANOL (CAS: 111-76-2)	
DNEL	Industry - Dermal; Short term : 89 mg/kg/day Industry - Inhalation; Short term : 663 mg/m ³ Industry - Dermal; Long term : 75 mg/kg/day Industry - Inhalation; Long term : 98 mg/m ³ Consumer - Dermal; Short term : 44.5 mg/kg/day Consumer - Oral; Short term : 13.4 mg/kg/day Consumer - Inhalation; Short term : 123 mg/m ³ Consumer - Inhalation; Long term : 49 mg/m ³
PNEC	- Fresh water; 8.8 mg/l - Marine water; 0.88 mg/l - Soil; 3.13 mg/kg soil dw - Intermittent release; 9.1 mg/l - Sediment (Freshwater); 34.6 mg/kg sediment dw - Sediment (Marinewater); 3.46 mg/kg sediment dw - STP; 463 mg/l
FATTY ALCOHOL ALKOXYLATE 4 (CAS: 111905-53-4)	
DNEL	No DNEL available.
PNEC	No PNEC available.
PROPYLENE GLYCOL (CAS: 57-55-6)	
DNEL	Industry - Inhalation; Long term systemic effects: 168 mg/m ³ Industry - Inhalation; Long term local effects: 10 mg/m ³ Consumer - Inhalation; Long term systemic effects: 50 mg/m ³ Consumer - Inhalation; Long term local effects: 10 mg/m ³
PNEC	- Fresh water; 260 mg/l - Marine water; 26 mg/l - STP; 20000 mg/kg - Sediment (Freshwater); 572 mg/kg - Sediment (Marinewater); 57.2 mg/kg - Soil; 50 mg/kg - Intermittent release; 183 mg/l
2,6-DIMETHYL-7-OCTEN-2-OL (CAS: 18479-58-8)	
DNEL	Workers - Inhalation; Long term systemic effects: 73.5 mg/m ³ Workers - Dermal; Long term systemic effects: 20.8 mg/kg bw/day General population - Inhalation; Long term systemic effects: 21.7 mg/m ³ General population - Dermal, Oral; Long term systemic effects: 12.5 mg/kg bw/day
PNEC	- Fresh water; 0.0278 mg/l - Marine water; 0.00278 mg/l - Intermittent release; 0.278 mg/l - STP; 10 mg/l - Sediment (Freshwater); 0.594 mg/kg sediment dw - Sediment (Marinewater); 0.0594 mg/kg sediment dw - Soil; 0.103 mg/kg soil dw

3,7-DIMETHYL-1,6-OCTADIEN-3-OL (CAS: 78-70-6)	
DNEL	<p>Workers - Inhalation; Long term systemic effects: 2.8 mg/m³</p> <p>Workers - Inhalation; Short term Acute: 16.5 mg/m³</p> <p>Workers - Dermal; Long term systemic effects: 2.5 mg/kg bw/day</p> <p>Workers - Dermal; Short term Acute: 5 mg/kg bw/day</p> <p>Workers - Dermal; Long term local effects: 15 mg/cm²</p> <p>Workers - Dermal; Short term Acute: 15 mg/cm²</p> <p>General population - Inhalation; Long term systemic effects: 0.7 mg/m³</p> <p>General population - Inhalation; Short term Acute: 4.1 mg/m³</p> <p>General population - Dermal; Long term systemic effects: 1.25 mg/kg bw/day</p> <p>General population - Dermal; Short term Acute: 2.5 mg/kg bw/day</p> <p>General population - Dermal; Long term local effects: 15 mg/cm²</p> <p>General population - Dermal; Short term Acute: 15 mg/cm²</p> <p>General population - Oral; Long term systemic effects: 0.2 mg/kg bw/day</p> <p>General population - Oral; Short term Acute: 1.2 mg/kg bw/day</p>
PNEC	<ul style="list-style-type: none"> - Fresh water; 0.2 mg/l - Marine water; 0.02 mg/l - Intermittent release; 2 mg/l - STP; 10 mg/l - Sediment (Freshwater); 2.22 mg/kg sediment dw - Sediment (Marinewater); 0.222 mg/kg sediment dw - Soil; 0.327 mg/kg soil dw
CITRAL (CAS: 5392-40-5)	
DNEL	<p>Workers - Inhalation; Long term systemic effects: 9 mg/m³</p> <p>Workers - Dermal; Long term systemic effects: 1.7 mg/kg bw/day</p> <p>Workers - Dermal; Long term local effects: 0.14 mg/cm²</p> <p>General population - Inhalation; Long term systemic effects: 2.7 mg/m³</p> <p>General population - Dermal; Long term systemic effects: 1 mg/kg bw/day</p> <p>General population - Dermal; Long term local effects: 0.14 mg/cm²</p> <p>General population - Oral; Long term systemic effects: 0.6 mg/kg bw/day</p>
PNEC	<ul style="list-style-type: none"> - Fresh water; 0.00678 mg/l - Marine water; 0.000678 mg/l - Intermittent release; 0.0678 mg/l - STP; 1.6 mg/l - Sediment (Freshwater); 0.125 mg/kg sediment dw - Sediment (Marinewater); 0.0125 mg/kg sediment dw - Soil; 0.0209 mg/kg soil dw
d-LIMONENE (CAS: 5989-27-5)	
DNEL	<p>Workers - Inhalation; Long term systemic effects: 33.3 mg/m³</p> <p>Workers - Dermal; Short term local effects, Acute: 0.222 mg/cm²</p> <p>General population - Inhalation; Long term systemic effects: 8.33 mg/m³</p> <p>General population - Dermal; Short term local effects, Acute: 0.111 mg/cm²</p> <p>General population - Oral; Long term systemic effects: 4.76 mg/kg bw/day</p>
PNEC	<ul style="list-style-type: none"> - Fresh water; 0.0054 mg/l - Marine water; 0.00054 mg/l - STP; 1.8 mg/l - Sediment (Freshwater); 1.32 mg/kg sediment dw - Marine water; 0.13 mg/kg sediment dw - Soil; 0.262 mg/kg soil dw
SODIUM HYDROXIDE (CAS: 1310-73-2)	
DNEL	<p>Consumer - Inhalation; local effects: 1 mg/m³</p> <p>Industry - Inhalation; Long term local effects: 1 mg/m³</p>

GERANIOL (CAS: 106-24-1)	
DNEL	<p>Workers - Inhalation; Long term systemic effects: 161.6 mg/m³</p> <p>Workers - Dermal; Long term systemic effects: 12.5 mg/kg bw/day</p> <p>Workers - Dermal; Long term local effects: 11.8 mg/cm²</p> <p>General population - Inhalation; Long term systemic effects: 47.8 mg/m³</p> <p>General population - Dermal; Long term systemic effects: 7.5 mg/kg bw/day</p> <p>General population - Dermal; Long term local effects: 11.8 mg/cm²</p> <p>General population - Oral; Long term systemic effects: 13.75 mg/kg bw/day</p>
PNEC	<ul style="list-style-type: none"> - Fresh water; 0.0108 mg/l - Marine water; 0.00108 mg/l - Intermittent release; 0.108 mg/l - STP; 0.7 mg/l - Sediment (Freshwater); 0.115 mg/kg - Sediment (Marinewater); 0.0115 mg/kg - Soil; 0.0167 mg/kg
BUTYLPHENYL METHYLPROPIONAL (CAS: 80-54-6)	
DNEL	<p>Workers - Inhalation; Long term systemic effects: 0.201 mg/m³</p> <p>Workers - Dermal; Long term systemic effects: 0.0569 mg/kg bw/day</p> <p>Workers - Dermal; Long term local effects: 0.41 mg/cm²</p> <p>Workers - Dermal; Short term Acute: 0.41 mg/cm²</p> <p>General population - Inhalation; Long term systemic effects: 0.0593 mg/m³</p> <p>General population - Inhalation; Long term local effects: 0.0593 mg/m³</p> <p>General population - Dermal; Long term systemic effects: 0.0342 mg/kg bw/day</p> <p>General population - Dermal; Short term Acute: 0.205 mg/cm²</p> <p>General population - Dermal; Long term local effects: 0.41 mg/cm²</p> <p>General population - Oral; Long term systemic effects: 0.0342 mg/kg bw/day</p> <p>General population - Oral; Short term Acute: 0.205 mg/kg bw/day</p>
PNEC	<ul style="list-style-type: none"> - Fresh water; 0.00204 mg/l - Marine water; 0.000204 mg/l - Intermittent release; 0.0204 mg/l - STP; 1.049 mg/l - Soil; 0.0463 mg/kg soil dw
PARA-MENTH-1-EN-8-OL (CAS: 98-55-5)	
DNEL	No DNEL available.
PNEC	<ul style="list-style-type: none"> - STP; 2.6 mg/l - Sediment (Freshwater); 1.85 mg/kg - Sediment (Marinewater); 0.185 mg/kg - Soil; 0.329 mg/kg
CITRONELLOL (CAS: 106-22-9)	
DNEL	<p>Workers - Inhalation; Long term systemic effects: 161.6 mg/m³</p> <p>Workers - Inhalation; Long term local effects: 10 mg/m³</p> <p>Workers - Inhalation; Short term Acute: 10 mg/m³</p> <p>Workers - Dermal; Long term systemic effects: 327.4 mg/kg bw/day</p> <p>General population - Inhalation; Long term systemic effects: 47.8 mg/m³</p> <p>General population - Inhalation; Long term local effects: 10 mg/m³</p> <p>General population - Inhalation; Short term Acute: 10 mg/m³</p> <p>General population - Dermal; Long term systemic effects: 196.4 mg/kg bw/day</p> <p>General population - Dermal; Short term local effects, Acute: 2.950 mg/cm²</p> <p>Workers - Dermal; Short term Acute, local effects: 2.950 mg/cm²</p> <p>General population - Oral; Long term systemic effects: 13.8 mg/kg bw/day</p>
PNEC	<ul style="list-style-type: none"> - Fresh water; 0.0024 mg/l - Marine water; 0.00024 mg/l - Intermittent release; 0.024 mg/l - STP; 580 mg/l - Sediment (Freshwater); 0.0256 mg/kg sediment dw - Sediment (Marinewater); 0.00256 mg/kg sediment dw - Soil; 0.00371 mg/kg soil dw

Nerol (CAS: 106-25-2)	
DNEL	Workers - Inhalation; Long term systemic effects: 5.4 mg/m ³ Workers - Dermal; Long term systemic effects: 0.76 mg/kg bw/day Workers - Dermal; Long term local effects: 0.133 mg/cm ² General population - Inhalation; Long term systemic effects: 1.3 mg/m ³ General population - Dermal; Long term systemic effects: 0.38 mg/kg bw/day General population - Oral; Long term systemic effects: 0.38 mg/kg bw/day
PNEC	- Fresh water; 0.00745 mg/l - Marine water; 0.000745 mg/l - Intermittent release; 0.0745 mg/l - STP; 12.9 mg/l - Sediment (Freshwater); 0.133 mg/kg sediment dw - Sediment (Marinewater); 0.0133 mg/kg sediment dw - Soil; 0.0223 mg/kg soil dw
CINNAMYL ALCOHOL (CAS: 104-54-1)	
DNEL	Workers - Inhalation; Long term systemic effects: 2.277 mg/m ³ Workers - Dermal; Long term systemic effects: 1.998 mg/kg bw/day General population - Inhalation; Long term systemic effects: 0.5665 mg/m ³ General population - Dermal; Long term systemic effects: 0.4926 mg/kg bw/day General population - Oral; Long term systemic effects: 3.995 mg/kg bw/day
PNEC	- Fresh water; 0.109 mg/l - Marine water; 0.0109 mg/l - Intermittent release; 1.09 mg/l - STP; 16.127 mg/l - Sediment (Freshwater); 220.188 mg/kg sediment dw - Sediment (Marinewater); 220.188 mg/kg sediment dw - Soil; 0.185 mg/kg soil dw
Decanal (CAS: 112-31-2)	
DNEL	Workers - Inhalation; Long term systemic effects: 24.9 mg/m ³ Workers - Dermal; Long term systemic effects: 7 mg/kg bw/day General population - Inhalation; Long term systemic effects: 6.1 mg/m ³ General population - Dermal; Long term systemic effects: 3.5 mg/kg bw/day General population - Oral; Long term systemic effects: 3.5 mg/kg bw/day
PNEC	- Fresh water; 0.00117 mg/l - Marine water; 0.000117 mg/l - Intermittent release; 0.0117 mg/l - STP; 3.16 mg/l - Sediment (Freshwater); 0.0972 mg/kg sediment dw - Sediment (Marinewater); 0.00972 mg/kg sediment dw - Soil; 0.0187 mg/kg soil dw
Octanal (CAS: 124-13-0)	
DNEL	Workers - Inhalation; Long term systemic effects: 1.3 mg/m ³ Workers - Dermal; Long term systemic effects: 0.37 mg/kg bw/day General population - Inhalation; Long term systemic effects: 0.32 mg/m ³ General population - Dermal; Long term systemic effects: 0.19 mg/kg bw/day General population - Oral; Long term systemic effects: 0.19 mg/kg bw/day
PNEC	- Fresh water; 0.00154 mg/l - Marine water; 0.000154 mg/l - STP; 3.16 mg/l - Sediment (Freshwater); 0.07146 mg/kg sediment dw - Sediment (Marinewater); 0.00715 mg/kg sediment dw - Soil; 0.01339 mg/kg soil dw

4-(2,6,-TRIMETHYLCYCLOHEX-1-ENE-1-YL)-BUT-3-ENE-2-ONE (CAS: 14901-07-6)	
DNEL	Workers - Inhalation; Long term systemic effects: 23.21 mg/m ³ Workers - Dermal; Long term systemic effects: 13.17 mg/kg bw/day General population - Inhalation; Long term systemic effects: 5.72 mg/m ³ General population - Dermal; Long term systemic effects: 6.58 mg/kg bw/day General population - Oral; Long term systemic effects: 3.29 mg/kg bw/day
PNEC	- Fresh water; 0.004146 mg/l - Marine water; 0.0004146 mg/l - Intermittent release; 0.04146 mg/l - STP; 0.698 mg/l - Sediment (Freshwater); 63.23 mg/kg sediment dw - Sediment (Marinewater); 63.23 mg/kg sediment dw - Soil; 29.47 mg/kg soil dw
BENZYL VIOLET 4B (CAS: 1694-09-3)	
DNEL	No DNEL available.
PNEC	No PNEC available.
BENZYLOXYMETHANOL (CAS: 14548-60-8)	
DNEL	No DNEL available.
PNEC	No PNEC available.
8.2. Exposure controls	
Protective equipment	
Appropriate engineering controls	Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.
Eye/face protection	Wear chemical splash goggles. Contact lenses should not be worn when working with this chemical.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Wear protective gloves made of the following material: In case of intensive contact, wear protective gloves (EN 374). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Appropriate Material - Butyl, Material Thickness - 0.6 to 0.8mm, Breakthrough Time - 8Hrs
Other skin and body protection	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Wear apron or protective clothing in case of contact. Barrier cream applied before work may make it easier to clean the skin after exposure, but does not prevent absorption through the skin.
Hygiene measures	Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station. No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Do not eat, drink or smoke when using this product.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Gas filter, type A2.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Coloured liquid.
Colour	Blue.
Odour	Alcoholic. Perfume.
pH	6.5 to 8.5
Melting point	Below minus 8°C
Initial boiling point and range	~90°C @ 760 mm Hg
Flash point	50°C CC (Closed cup).
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 6.0% v/v METHANOL IN AIR Upper flammable/explosive limit: 36.5% v/v METHANOL IN AIR
Relative density	0.985 @ 20°C
Solubility(ies)	Completely soluble in water. Very soluble in the following materials: Alcohols. Almost insoluble in the following materials: Hydrocarbons. Aromatic solvents.
Comments	Information given is applicable to the product as supplied.
9.2. Other information	
Volatile organic compound	This product contains a maximum VOC content of 90.0 g/litre.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not applicable. Will not polymerise.
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10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidising agents.
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10.5. Incompatible materials

Materials to avoid	Strong oxidising agents. Strong acids. Strong alkalis.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Fire creates: Thermal decomposition or combustion products may include the following substances: Acrid smoke or fumes. Carbon monoxide (CO). Carbon dioxide (CO ₂).
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg)	3,550.3
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Acute toxicity - dermal

ATE dermal (mg/kg)	11,834.32
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Acute toxicity - inhalation

ATE inhalation (vapours mg/l)	118.34
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Specific target organ toxicity - single exposure	
STOT - single exposure	May cause damage to organs.
General information	To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated.
Inhalation	Vapours may irritate throat/respiratory system. Symptoms following overexposure may include the following: Headache. Dizziness. Drowsiness. Nausea, vomiting. Vapours in high concentrations are narcotic.
Ingestion	Ingestion of large amounts may cause headaches, nausea, vomiting, abdominal pain, drowsiness and unconsciousness. Methanol can cause blindness when ingested.
Skin contact	Contains components which may penetrate the skin. Product has a defatting effect on skin. May cause allergic contact eczema.
Eye contact	May cause temporary eye irritation.
Acute and chronic health hazards	Not expected to be a health hazard when used under normal conditions. Risk of long-term effects is considered to be minimal from exposure to concentrations below the level of OEL. Prolonged or repeated exposure to vapours in high concentrations may cause the following adverse effects: Central and/or peripheral nervous system damage. Brain damage.
Route of entry	Inhalation Ingestion. Skin absorption.
Target organs	Central nervous system, Eyes, Gastro-intestinal tract, Kidneys, Liver, Respiratory system, lungs, Blood
Medical symptoms	Symptoms following overexposure may include the following: Nausea, vomiting. Severe stomach pain. Central nervous system depression. Blindness. Unconsciousness, possibly death.
Medical considerations	Irritation of eyes and mucous membranes. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Visual disturbances, including blurred vision.
Toxicological information on ingredients.	
METHANOL	
Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	5,628.0
Species	Rat
Notes (oral LD₅₀)	Toxic if swallowed.
ATE oral (mg/kg)	300.0
Acute toxicity - dermal	
Acute toxicity dermal (LD₅₀ mg/kg)	15,800.0
Species	Rabbit
Notes (dermal LD₅₀)	Toxic in contact with skin.
ATE dermal (mg/kg)	1,000.0
Acute toxicity - inhalation	
Acute toxicity inhalation (LC₅₀ vapours mg/l)	83.2
Species	Rat
Notes (inhalation LC₅₀)	Toxic if inhaled.
ATE inhalation (vapours mg/l)	10.0
Skin corrosion/irritation	
Animal data	Not irritating.

Serious eye damage/irritation	
Serious eye damage/irritation	Not irritating.
Respiratory sensitisation	
Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation	
Skin sensitisation	Not sensitising.
Germ cell mutagenicity	
Genotoxicity - in vitro	This substance has no evidence of mutagenic properties. Negative.
Carcinogenicity	
Carcinogenicity	Based on available data the classification criteria are not met.
Reproductive toxicity	
Reproductive toxicity - fertility	Fertility: - NOAEC 1.3 mg/l, , Rat Based on available data the classification criteria are not met.
Specific target organ toxicity - single exposure	
STOT - single exposure	Causes damage to organs.
Target organs	Central nervous system Optic Nerve (Nervus Opticus)
Specific target organ toxicity - repeated exposure	
STOT - repeated exposure	Based on available data the classification criteria are not met.
Aspiration hazard	
Aspiration hazard	Based on available data the classification criteria are not met.
Inhalation	Toxic by inhalation. Possible effects include headache, dizziness, cramp, nausea, vomiting, blindness, unconsciousness and death. Danger of very serious irreversible effects.
Ingestion	Toxic if swallowed. Possible effects include headache, dizziness, nausea, vomiting, cramp, blindness, unconsciousness and death. There is danger of very serious and irreversible effects if swallowed.
Skin contact	Toxic in contact with skin. Danger of serious irreversible effects.
2-BUTOXYETHANOL	
Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	1,414.0
Species	Guinea pig
ATE oral (mg/kg)	1,414.0
Acute toxicity - dermal	
ATE dermal (mg/kg)	2,000.0
Acute toxicity - inhalation	
ATE inhalation (vapours mg/l)	20.0
Skin corrosion/irritation	
Extreme pH	Slightly irritating. Rabbit.
Serious eye damage/irritation	
Serious eye damage/irritation	Slightly irritating. Rabbit.

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	Negative.
Genotoxicity - in vivo	Negative.
Carcinogenicity	
Carcinogenicity	Based on available data the classification criteria are not met.
Reproductive toxicity	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	No evidence of reproductive toxicity in animal studies.
Inhalation	Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
Ingestion	Harmful: may cause lung damage if swallowed. Pneumonia may be the result if vomited material containing solvents reaches the lungs.
Skin contact	Repeated exposure may cause skin dryness or cracking.
Eye contact	Irritation of eyes and mucous membranes.
Route of entry	Ingestion Inhalation
Target organs	Brain Respiratory system, lungs Mucous membranes
Medical symptoms	Skin irritation. Irritation of eyes and mucous membranes. High concentration of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting.

SECTION 12: Ecological Information

Ecotoxicity	The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.
12.1. Toxicity	
Toxicity	Not considered toxic to fish.
Ecological information on ingredients.	
METHANOL	
Acute toxicity - fish	LC ₅₀ , 96 hours: 15400 mg/l, <i>Lepomis macrochirus</i> (Bluegill)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours, 48 hours: > 10000 mg/l, <i>Daphnia magna</i>
Acute toxicity - aquatic plants	EC ₅₀ , 96 hours: ~ 22000 mg/l, <i>Pseudokirchneriella subcapitata</i>
2-BUTOXYETHANOL	
Acute toxicity - fish	LC ₅₀ , 96 hours: 1464 mg/l, <i>Onchorhynchus mykiss</i> (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 1800 mg/l, <i>Daphnia magna</i>
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 911 mg/l, <i>Pseudokirchneriella subcapitata</i> NOEC, 72 hours: 88 mg/l, <i>Pseudokirchneriella subcapitata</i>

12.2. Persistence and degradability	
Persistence and degradability	The product is biodegradable but it must not be discharged into drains without permission from the authorities. The surfactant(s) contained in this product complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them at their direct request, or at the request of a detergent manufacturer.
Ecological information on ingredients.	
METHANOL	
Biodegradation	The substance is readily biodegradable.
2-BUTOXYETHANOL	
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.	
METHANOL	
Bioaccumulative potential	Not potentially bioaccumulative
Partition coefficient	-0.77
2-BUTOXYETHANOL	
Partition coefficient	log Pow: < 2 : 0.8
12.4. Mobility in soil	
Mobility	The product is soluble in water.
Ecological information on ingredients.	
METHANOL	
Mobility	The product is soluble in water. The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.
2-BUTOXYETHANOL	
Mobility	The product is soluble in water.
Henry's law constant	0.0098 Pa m ³ /mol @ °C
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.	
METHANOL	
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.
12.6. Other adverse effects	
Other adverse effects	Not applicable.
Ecological information on ingredients.	
METHANOL	
Other adverse effects	Do not allow material to contaminate ground water system.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

General information	Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. The packaging must be empty (drop-free when inverted).
Disposal methods	Absorb in vermiculite, dry sand or earth and place into containers. Dispose of waste via a licensed waste disposal contractor. Containers should be thoroughly emptied before disposal because of the risk of an explosion.

SECTION 14: Transport information**14.1. UN number**

UN No. (ADR/RID)	1993
UN No. (IMDG)	1993
UN No. (ICAO)	1993
UN No. (ADN)	1993

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	FLAMMABLE LIQUID, N.O.S. (CONTAINS METHANOL)
Proper shipping name (IMDG)	FLAMMABLE LIQUID, N.O.S. (CONTAINS METHANOL)
Proper shipping name (ICAO)	FLAMMABLE LIQUID, N.O.S. (CONTAINS METHANOL)
Proper shipping name (ADN)	FLAMMABLE LIQUID, N.O.S. (CONTAINS METHANOL)

14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID classification code	F1
ADR/RID label	3
IMDG class	3
ICAO class/division	3
ADN class	3

Transport labels**14.4. Packing group**

ADR/RID packing group	III
IMDG packing group	III
ADN packing group	III
ICAO packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/ marine pollutant	No.
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14.6. Special precautions for user	
EmS	F-E, S-E
ADR transport category	3
Emergency Action Code	•3Y
Hazard Identification Number (ADR/RID)	30
Tunnel restriction code	(D/E)
14.7. Transport in bulk according to Annex II of MARPOL73/78 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 Pollution (Special Waste) Regulations 1980 (as amended). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
EU legislation	Dangerous Substances Directive 67/548/EEC. 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). 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. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG228. Approved Classification and Labelling Guide (Sixth edition) L131.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Issued by	HS&E Manager.
Revision date	15/11/2018
Revision	3
Supersedes date	24/05/2018
Risk phrases in full	R10 Flammable. R11 Highly flammable. R20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R23/24/25 Toxic by inhalation, in contact with skin and if swallowed. R36 Irritating to eyes. R36/38 Irritating to eyes and skin. R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. R67 Vapours may cause drowsiness and dizziness. R68/20/21/22 Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

Hazard statements in full	H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H290 May be corrosive to metals. H301 Toxic if swallowed. H302 Harmful if swallowed. H311 Toxic in contact with skin. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation. H331 Toxic if inhaled. H332 Harmful if inhaled. H370 Causes damage to organs (Central nervous system, Optic Nerve (Nervus Opticus)). H371 May cause damage to organs.
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The information provided in this document is based on our present state of knowledge of the product and is given in good faith and to the best of our experience. However, it should not be construed as a technical specification or as guaranteeing specific properties, accuracy, reliability or completeness. In no event we will be responsible for damages or effects of any nature whatsoever, either express or implied, resulting from the use of this information. It is the own responsibility of the dealer and the user of the product to comply with all prevailing and applicable laws, regulations and directives. They should also make their own determination as to the suitability of the product for a particular use or application by carrying out a full risk assessment of their specific processes and systems of work. All information contained within this document is for the product in its undiluted state and 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 Roadcrew's knowledge and belief, accurate and reliable as of the date indicated.