SAFETY DATA SHEET
Holts Radweld

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

1.1. Product identifier

Product name Holts Radweld

Product number HREP0021A, HREP0021B, HREP0032A, HREP0061A, 52032020001, HREP0001B, HREP0002A, HREP0002B, HREP0801A, HREP0901A, RW2GR, RW2HPR, *RW2R*, RW2RU, RW2SKR, 52032020002, RW4BUL, *RW4R*, RW4SFR, RW4SKR, RW9, 52032020022, 52032020089, 52032020100, *52032030002*, 52032030011, 52032030022, HREP0001A

UFI UFI: 0S46-H0A4-900H-7Y2A

REACH registration notes This is a MIXTURE; no registration information contained in this document . Holts are classed as Downstream User.

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

Identified uses Car maintenance product.

1.3. Details of the supplier of the safety data sheet

Supplier
A Holts Car Care Product
Holt Lloyd International Ltd
Barton Dock Road
Stretford
Manchester
M32 0YQ - England, UK
+44 (0) 161 866 4800
FAX +44 (0) 161 866 4854
www.holtsauto.com

Contact person Contact Email address: info@holtsauto.com

1.4. Emergency telephone number

Emergency telephone UK - 00 44 (0) 161 866 4800 Office hrs = 0900 - 1700 hrs

National emergency telephone number
National Poisons Information Service
City Hospital, Birmingham B187QH, United Kingdom
Telephone: +44 121 507 4123
Email: allistervale@npis.org, sallybradberry@npis.org

www.npis.org

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

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2.2. Label elements

Hazard statements NC Not Classified

Precautionary statements P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P501 Dispose of contents/ container in accordance with national regulations.

UFI UFI: 0S46-H0A4-900H-7Y2A

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ETHANOL **1-5%**

CAS number: 64-17-5 EC number: 200-578-6 REACH registration number: 01-2119457610-43-XXXX

Classification
Flam. Liq. 2 - H225

2-Methoxymethylethoxypropanol **<1%**

CAS number: 34590-94-8 EC number: 252-104-2 REACH registration number: 01-2119450011-60-XXXX

Classification
Not Classified

Naphtha (petroleum), Light Aromatic **<1%**

CAS number: 64742-95-6 EC number: 918-668-5 REACH registration number: 01-2119455851-35-XXXX

Classification
Flam. Liq. 3 - H226
STOT SE 3 - H335, H336
Asp. Tox. 1 - H304
Aquatic Chronic 2 - H411

Triethanolamine **<1%**

CAS number: 102-71-6 EC number: 203-049-8 REACH registration number: 01-2119486482-31-XXXX

Classification
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
STOT SE 3 - H335

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SODIUM HYDROXIDE		**<1%**
CAS number: 1310-73-2	EC number: 215-185-5	REACH registration number: 01-2119457892-27-XXXX

Classification
Skin Corr. 1A - H314
Eye Dam. 1 - H318

PHOSPHORIC ACID ...%		**<1%**
CAS number: 7664-38-2	EC number: 231-633-2	REACH registration number: 01-2119485924-24-XXXX

Classification
Skin Corr. 1B - H314
Eye Dam. 1 - H318

(Benzyloxy)methanol		**<1%**
CAS number: 14548-60-8	EC number: 238-588-8	

Classification
Acute Tox. 4 - H302
Acute Tox. 4 - H312
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
STOT SE 3 - H335

DIETHANOLAMINE		**<1%**
CAS number: 111-42-2	EC number: 203-868-0	REACH registration number: 01-2119488930-28-XXXX

Classification
Acute Tox. 4 - H302
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
STOT RE 2 - H373

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Treat symptomatically.

Inhalation Move affected person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues.

Skin contact Remove affected person from source of contamination. Get medical attention if irritation persists after washing.

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Eye contact 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 This is unlikely to occur but symptoms similar to those of ingestion may develop.

Ingestion May cause discomfort if swallowed.

Skin contact Prolonged skin contact may cause redness and irritation.

Eye contact Prolonged contact may cause redness and/or tearing.

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards In case of fire, toxic and corrosive gases may be formed. No unusual fire or explosion hazards noted.

Hazardous combustion products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen.

5.3. Advice for firefighters

Protective actions during firefighting No specific firefighting precautions known.

Special protective equipment for firefighters Use protective equipment appropriate for surrounding materials.

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.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

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Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep only in the original container.

Storage class Chemical storage.

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

ETHANOL

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m³
Short-term exposure limit (15-minute): WEL

2-Methoxymethylethoxypropanol

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

SODIUM HYDROXIDE

Long-term exposure limit (8-hour TWA): WEL
Short-term exposure limit (15-minute): WEL 2 mg/m³

PHOSPHORIC ACID ...%

Long-term exposure limit (8-hour TWA): WEL 1 mg/m³
Short-term exposure limit (15-minute): WEL 2 mg/m³

METHANOL

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³
Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³
Sk

WEL = Workplace Exposure Limit.
Sk = Can be absorbed through the skin.

ETHANOL (CAS: 64-17-5)

DNEL

Workers - Inhalation; Long term systemic effects: 950 mg/m³
Workers - Inhalation; Short term local effects: 1900 mg/m³
Workers - Dermal; Long term systemic effects: 343 mg/kg bw/day
General population - Inhalation; Long term systemic effects: 114 mg/m³
General population - Dermal; Long term systemic effects: 206 mg/kg bw/day
General population - Oral; Long term systemic effects: 87 mg/kg bw/day
General population - Inhalation; Short term local effects: 950 mg/m³

PNEC

Fresh water; Long term 0.96 mg/l
marine water; Long term 0.79 mg/l
Intermittent release; Long term 2.75 mg/l
STP; Long term 580 mg/l
Sediment (Freshwater); Long term 3.6 mg/kg sediment dw
Sediment (Marinewater); Long term 2.9 mg/kg sediment dw
Soil; Long term 0.63 mg/kg soil dw

2-Methoxymethylethoxypropanol (CAS: 34590-94-8)

Holts Radweld

DNEL

Workers - Inhalation; Long term systemic effects: 308 mg/m³
Workers - Dermal; Long term systemic effects: 283 mg/kg bw/day
General population - Inhalation; Long term systemic effects: 37.2 mg/m³
General population - Dermal; Long term systemic effects: 121 mg/kg bw/day
General population - Oral; Long term systemic effects: 36 mg/kg bw/day

PNEC

Fresh water; Long term 19 mg/l
marine water; Long term 1.9 mg/l
STP; Long term 4168 mg/l
Sediment (Freshwater); Long term 70.2 mg/kg sediment dw
Sediment (Marinewater); Long term 7.02 mg/kg sediment dw
Soil; Long term 2.74 mg/kg soil dw

Naphtha (petroleum), Light Aromatic (CAS: 64742-95-6)

DNEL

Industry - Dermal; : 25 mg/kg bw/day
Industry - Inhalation; : 150 mg/m³
Consumer - Dermal; : 11 mg/kg bw/day
Consumer - Inhalation; : 32 mg/m³
Consumer - Oral; : 11 mg/kg bw/day

Triethanolamine (CAS: 102-71-6)

DNEL

Workers - Inhalation; Long term local effects: 1 mg/m³
Workers - Dermal; Long term systemic effects: 7.5 mg/kg bw/day
Workers - Dermal; Long term local effects: 140 µg/cm2
General population - Inhalation; Long term local effects: 0.4 mg/m³
General population - Dermal; Long term systemic effects: 2.66 mg/kg bw/day
General population - Dermal; Long term local effects: 70 µg/cm2
General population - Oral; Long term systemic effects: 3.3 mg/kg bw/day

PNEC

Fresh water; Long term 0.32 mg/l
marine water; Long term 0.032 mg/l
STP; Long term 10 mg/l
Sediment (Freshwater); Long term 1.7 mg/kg sediment dw
Sediment (Marinewater); Long term 0.17 mg/kg sediment dw
Soil; Long term 0.151 mg/kg soil dw

SODIUM HYDROXIDE (CAS: 1310-73-2)

DNEL

Consumer - Inhalation; Long term local effects: 1 mg/m³
Workers - Dermal; Short term local effects: 2 mg/kg/day
Workers - Inhalation; Short term local effects: 2 mg/m³
Workers - Inhalation; Long term local effects: 1 mg/m³

PHOSPHORIC ACID ...% (CAS: 7664-38-2)

DNEL

Workers - Inhalation; Long term systemic effects: 10.7 mg/m³
Workers - Inhalation; Long term local effects: 1 mg/m³
Workers - Inhalation; Short term local effects: 2 mg/m³
General population - Inhalation; Long term systemic effects: 4.57 mg/m³
General population - Inhalation; Long term local effects: 0.36 mg/m³
General population - Oral; Long term systemic effects: 0.1 mg/kg bw/day

DIETHANOLAMINE (CAS: 111-42-2)

Holts Radweld

DNEL	Workers - Inhalation; Long term systemic effects: 0.75 mg/m³ Workers - Inhalation; Long term local effects: 0.5 mg/m³ Workers - Dermal; Long term systemic effects: 0.13 mg/kg bw/day General population - Inhalation; Long term systemic effects: 0.125 mg/m³ General population - Dermal; Long term systemic effects: 0.07 mg/kg bw/day General population - Oral; Long term systemic effects: 0.06 mg/kg bw/day
PNEC	Fresh water; Long term 0.021 mg/l marine water; Long term 0.002 mg/l STP; Long term 100 mg/l Sediment (Freshwater); Long term 0.092 mg/kg sediment dw Sediment (Marinewater); Long term 0.009 mg/kg sediment dw Soil; Long term 1.63 mg/kg soil dw

8.2. Exposure controls

Protective equipment

Appropriate engineering controls	Provide adequate general and local exhaust ventilation.
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Rubber (natural, latex). To protect hands from chemicals, gloves should comply with European Standard EN374.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene measures	Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. Do not eat, drink or smoke when using this product.
Respiratory protection	Respiratory protection not required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Coloured liquid. Separates on standing
Colour	Brown.
Odour	Characteristic.
pH	pH (concentrated solution): 8.1
Flash point	> 60°C Closed cup.
Relative density	1.022 @ 20°C
Solubility(ies)	Miscible with water.

9.2. Other information

Holts Radweld

Volatile organic compound This product contains a maximum VOC content of 5 %.

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.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not applicable. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time.

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 Fire creates: Carbon monoxide (CO). Carbon dioxide (CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects No information available.

Acute toxicity - oral

Notes (oral LD_{50}) Based on available data the classification criteria are not met.

ATE oral (mg/kg) 89,272.96

Acute toxicity - dermal

Notes (dermal LD_{50}) Based on available data the classification criteria are not met.

ATE dermal (mg/kg) 267,818.88

Acute toxicity - inhalation

Notes (inhalation LC_{50}) Based on available data the classification criteria are not met.

ATE inhalation (gases ppm) 624,910.73

ATE inhalation (vapours mg/l) 2,678.19

ATE inhalation (dusts/mists mg/l) 446.36

Skin corrosion/irritation

Skin corrosion/irritation 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.

Holts Radweld

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.
Genotoxicity - in vivo	Based on available data the classification criteria are not met.

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	Does not contain any substances known to be toxic to reproduction.

Specific target organ toxicity - single exposure

STOT - single exposure	Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard	Not relevant.

Inhalation	No specific health hazards known.
Ingestion	May cause discomfort if swallowed. May cause stomach pain or vomiting.
Skin contact	Prolonged and frequent contact may cause redness and irritation.
Eye contact	Prolonged contact may cause redness and/or tearing.
Acute and chronic health hazards	No specific health hazards known.

Toxicological information on ingredients.

ETHANOL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	10,470.0
Species	Rat

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	17,100.0
Species	Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	124.7
Species	Rat

Skin corrosion/irritation

Holts Radweld

Skin corrosion/irritation	Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation	Not sensitising.

Skin sensitisation

Skin sensitisation	Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro	Does not contain any substances known to be mutagenic.

Carcinogenicity

Carcinogenicity	Does not contain any substances known to be carcinogenic.

Reproductive toxicity

Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - single exposure

STOT - single exposure	Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Based on available data the classification criteria are not met.

Aspiration hazard

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

2-Methoxymethylethoxypropanol

Acute toxicity - oral

Notes (oral LD_{50})	LD_{50} > 5000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD_{50})	LD_{50} > 2000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC_{50})	LC50 1667 mg/m³, Inhalation, Rat

Skin corrosion/irritation

Skin corrosion/irritation	Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation	Not irritating

Respiratory sensitisation

Respiratory sensitisation	No information available.

Holts Radweld

Skin sensitisation

Skin sensitisation	Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro	Negative.
Genotoxicity - in vivo	No information available.

Carcinogenicity

Carcinogenicity	No information available.

Reproductive toxicity

Reproductive toxicity - fertility	Two-generation study - NOAEL 300 ppm, Inhalation, Rat P Two-generation study - NOAEL 1000 ppm, Inhalation, Rat F1

Specific target organ toxicity - single exposure

STOT - single exposure	Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard	Not relevant.

Naphtha (petroleum), Light Aromatic

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	3,492.0
Species	Rat

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	3,160.0
Species	Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	6,193.0
Species	Rat

Skin corrosion/irritation

Skin corrosion/irritation	Causes mild skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation	Not irritating

Respiratory sensitisation

Respiratory sensitisation	No information available.

Skin sensitisation

Skin sensitisation	Not sensitising.

Holts Radweld

Germ cell mutagenicity

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

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure May cause drowsiness or dizziness. May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways.

SODIUM HYDROXIDE

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg) 500.0

Species Rat

PHOSPHORIC ACID ...%

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg) 2,600.0

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg) 2,740.0

Species Rabbit

Skin corrosion/irritation

Skin corrosion/irritation Causes severe burns.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Negative.

Carcinogenicity

Carcinogenicity There is no evidence that the product can cause cancer.

Holts Radweld

Reproductive toxicity

Reproductive toxicity - fertility	Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure	Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard	Not relevant.

(Benzyloxy)methanol

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	1,700.0
Species	Rat
ATE oral (mg/kg)	500.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	1,500.0
Species	Rat
ATE dermal (mg/kg)	1,100.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} dust/mist mg/l)	502.0
Species	Rat

Skin corrosion/irritation

Skin corrosion/irritation	Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye damage.

Specific target organ toxicity - single exposure

STOT - single exposure	May cause respiratory irritation.

DIETHANOLAMINE

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	1,100.0
Species	Rat
Notes (oral LD_{50})	Harmful if swallowed.
ATE oral (mg/kg)	500.0

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Acute toxicity - dermal

Notes (dermal LD_{50}) Not available.

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Negative with metabolic activation. Negative without metabolic activation.

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 Does not contain any substances known to be toxic to reproduction.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Central and/or peripheral nervous system damage. Liver and/or kidney damage.

Aspiration hazard

Aspiration hazard Not relevant.

SECTION 12: Ecological information

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

Ecological information on ingredients.

Naphtha (petroleum), Light Aromatic

Ecotoxicity Toxic to aquatic life with long lasting effects.

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish No information available.

Acute toxicity - aquatic invertebrates Not available.

Acute toxicity - aquatic plants Not available.

Holts Radweld

Acute toxicity - microorganisms	Not available.
Acute toxicity - terrestrial	Not available.

Chronic aquatic toxicity

Chronic toxicity - fish early life stage	Not available.
Short term toxicity - embryo and sac fry stages	Not available.
Chronic toxicity - aquatic invertebrates	Not available.

Ecological information on ingredients.

ETHANOL

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 13000 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	LC_{50}, 48 hours: 12340 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 48 hours: 12900 mg/l, Selenastrum capricornutum
Acute toxicity - microorganisms	EC_{50}, 4 hours: 5800 mg/l, Activated sludge

Chronic aquatic toxicity

Chronic toxicity - fish early life stage	NOEC, 24 days: 0.08 mg/l, Pimephales promelas (Fat-head Minnow)
Chronic toxicity - aquatic invertebrates	NOEC, 10 days: 9.6 mg/l, Daphnia magna

2-Methoxymethylethoxypropanol

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: > 1000 mg/l, Poecilia reticulata (Guppy)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 1919 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: > 1000 mg/l, Selenastrum capricornutum
Acute toxicity - microorganisms	EC10, 18 hours: 4168 mg/l, Pseudomonas putida

Naphtha (petroleum), Light Aromatic

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 9.2 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 3.2 mg/l, Daphnia magna

Holts Radweld

Acute toxicity - aquatic plants	EC_{50}, 72 hours: 2.9 mg/l, Algae NOEC, 71 hours: 1 mg/l, Pseudokirchneriella subcapitata

Chronic aquatic toxicity

Chronic toxicity - fish early life stage	NOEC, 28 days: 1.23 mg/l, Oncorhynchus mykiss (Rainbow trout)
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 2.14 mg/l, Daphnia magna

SODIUM HYDROXIDE

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 33-189 hours: 96 mg/l, Fish LC_{50}, 45.5 hours: 96 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC_{50}, 40-240 hours: 48 mg/l, Daphnia magna

PHOSPHORIC ACID ...%

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 138 mg/l, Gambusia affinis LC_{50}, 96 hours: 3-3.25 mg/l, Lepomis macrochirus (Bluegill)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: > 100 mg/l, Daphnia magna
Acute toxicity - aquatic plants	ErC50, 72 hours: > 100 mg/l, Desmodesmus subspicatus NOEC, 72 hours: 100 mg/l, Desmodesmus subspicatus
Acute toxicity - microorganisms	EC_{50}, : 270 mg/l, Activated sludge

(Benzyloxy)methanol

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 81.5 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 43 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC_{50}, 72 hours: 17.7 mg/l, Scenedesmus subspicatus

DIETHANOLAMINE

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 460 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 30.1 mg/l, Ceriodaphnia dubia
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 9.5 mg/l, Pseudokirchneriella subcapitata
Acute toxicity - microorganisms	EC10, 30 minutes: > 1000 mg/l, Activated sludge

Holts Radweld

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 1.05 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability The product is biodegradable.

Ecological information on ingredients.

ETHANOL

Persistence and degradability	Rapidly degradable
Biological oxygen demand	1000 mg/g
Chemical oxygen demand	1900 mg/g

2-Methoxymethylethoxypropanol

Persistence and degradability	Rapidly degradable

Naphtha (petroleum), Light Aromatic

Biodegradation	Rapidly degradable Water - Degradation 78%: 28 days

(Benzyloxy)methanol

Biodegradation	Rapidly degradable Water - Degradation 100%: 18 days

DIETHANOLAMINE

Biodegradation	Rapidly degradable

12.3. Bioaccumulative potential

Bioaccumulative potential The product is not bioaccumulating.

Ecological information on ingredients.

ETHANOL

Partition coefficient	log Pow: -0.35

2-Methoxymethylethoxypropanol

Bioaccumulative potential	The product is not bioaccumulating.

Naphtha (petroleum), Light Aromatic

Partition coefficient	log Pow: < 4.5

SODIUM HYDROXIDE

Bioaccumulative potential	No potential for bioaccumulation.

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PHOSPHORIC ACID ...%

Bioaccumulative potential Not relevant.

(Benzyloxy)methanol

Partition coefficient log Pow: 0.3

12.4. Mobility in soil

Mobility The product contains substances which are water-soluble and may spread in water systems.

Ecological information on ingredients.

ETHANOL

Mobility Mobile.

Henry's law constant 3.3 x 10E-6 atm m³/mol @ °C

Surface tension 24.5 mN/m @ 20°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.

2-Methoxymethylethoxypropanol

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

Naphtha (petroleum), Light Aromatic

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

SODIUM HYDROXIDE

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

PHOSPHORIC ACID ...%

Results of PBT and vPvB assessment Not relevant.

(Benzyloxy)methanol

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

DIETHANOLAMINE

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

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Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

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

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

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 The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

EU legislation 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).
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.

Authorisations (Annex XIV Regulation 1907/2006) No specific authorisations are known for this product.

Restrictions (Annex XVII Regulation 1907/2006) No specific restrictions on use are known for this product.

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15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

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.
ATE: Acute Toxicity Estimate.
BOD: Biochemical Oxygen Demand.
CAS: Chemical Abstracts Service.
DNEL: Derived No Effect Level.
EC_{50}: 50% of maximal Effective Concentration.
GHS: Globally Harmonized System.
IATA: International Air Transport Association.
ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
IMDG: International Maritime Dangerous Goods.
LC_{50}: Lethal Concentration to 50 % of a test population.
LD_{50}: Lethal Dose to 50% of a test population (Median Lethal Dose).
NOAEL: No Observed Adverse Effect Level.
NOEC: No Observed Effect Concentration.
PBT: Persistent, Bioaccumulative and Toxic substance.
PNEC: Predicted No Effect Concentration.
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
vPvB: Very Persistent and Very Bioaccumulative.

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Revision 2

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SDS number 14894

Hazard statements in full

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
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.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.