

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

### 1.1. Product identifier

Product form : Mixture  
Product name : R-244 GLASS & MIRROR CLEANER  
Product code : 002777055942  
Type of product : Detergent  
Vaporizer : Aerosol  
Product group : End product

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

#### Relevant identified uses

Intended for general public  
Main use category : Consumer use, Professional use, Industrial use  
Use of the substance/mixture : Glass cleaner

### 1.3. Details of the supplier of the safety data sheet

TYGRIS LTD  
UNIT 31  
KYLE ROAD INDUSTRIAL ESTATE  
IRVINE  
SCOTLAND  
T 01294 311066  
[Jon.Butcher@tygrisindustrial.com](mailto:Jon.Butcher@tygrisindustrial.com)

### 1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Aerosol, Category 1 H222;H229  
Serious eye damage/eye irritation, Category 2 H319  
Specific target organ toxicity – Single exposure, Category 3, H336  
Narcosis  
Full text of H- and EUH-statements: see section 16

#### Adverse physicochemical, human health and environmental effects

Pressurised container: May burst if heated. Extremely flammable aerosol. May cause drowsiness or dizziness. Causes serious eye irritation.

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)	: Danger
Contains	: Propan-2-ol
Hazard statements (CLP)	: H222 - Extremely flammable aerosol. H229 - Pressurised container: May burst if heated. H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness.
Precautionary statements (CLP)	: P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211 - Do not spray on an open flame or other ignition source. P251 - Do not pierce or burn, even after use. P261 - Avoid breathing vapours, spray. P271 - Use only outdoors or in a well-ventilated area. P280 - Wear protective gloves, eye protection. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention. P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C, 122 °F. P501 - Dispose of contents/ container in accordance with local regulations. contents, container hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Child-resistant fastening	: Not applicable
Tactile warning	: Not applicable

## 2.3. Other hazards

Contains no PBT and/or vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Propan-2-ol substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, LT, LV, PL, PT, RO, SE, SI, SK, IS, NO, MK, CH)	CAS-No.: 67-63-0 EC-No.: 200-661-7 EC Index-No.: 603-117-00-0 REACH-no: 01-2119457558-25	25 – 50	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
Petroleum gases, liquefied (Contains < 0.1% 1,3-butadiene) substance with national workplace exposure limit(s) (BE, CZ, GB, GR, HR, TR) (Note K)	CAS-No.: 68476-85-7 EC-No.: 270-704-2 EC Index-No.: 649-202-00-6	5 – 10	Flam. Gas 1A, H220 Press. Gas
Ammonia substance with national workplace exposure limit(s) (FI) (Note B)	CAS-No.: 1336-21-6 EC-No.: 215-647-6 EC Index-No.: 007-001-01-2 REACH-no: 01-2119488876-14	0.1 – 0.2	Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
(R)-p-mentha-1,8-diene substance with national workplace exposure limit(s) (DE, ES, FI, SI, NO, CH)	CAS-No.: 5989-27-5 EC-No.: 227-813-5 EC Index-No.: 601-096-00-2	0.005 – 0.05	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410
Citral substance with national workplace exposure limit(s) (BE, ES, IE, PL)	CAS-No.: 5392-40-5 EC-No.: 226-394-6 EC Index-No.: 605-019-00-3	0.005 – 0.05	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 3, H412
Diethyl phthalate substance with national workplace exposure limit(s) (AT, BE, BG, DK, EE, ES, FI, FR, GB, GR, HR, IE, LT, LV, PL, PT, SE, IS, NO, MK, CH)	CAS-No.: 84-66-2 EC-No.: 201-550-6	0.005 – 0.05	Not classified
Pin-2(3)-ene substance with national workplace exposure limit(s) (BE, EE, ES, LT, PT, SE, NO, CH)	CAS-No.: 80-56-8 EC-No.: 201-291-9	0.0000001 – 0.005	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)
p-cymene substance with national workplace exposure limit(s) (DK, EE, LT, SE, IS)	CAS-No.: 99-87-6 EC-No.: 202-796-7 EC Index-No.: 601-094-00-1	0.0000001 – 0.005	Flam. Liq. 3, H226 Acute Tox. 3 (Inhalation), H331 (ATE=0.5 mg/l/4h) Asp. Tox. 1, H304 Aquatic Chronic 2, H411

#### Specific concentration limits:

Name	Product identifier	Specific concentration limits (%)
Ammonia	CAS-No.: 1336-21-6 EC-No.: 215-647-6 EC Index-No.: 007-001-01-2 REACH-no: 01-2119488876-14	(5 ≤ C ≤ 100) STOT SE 3; H335

- Note B:** Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.
- Note K:** The harmonised classification as a carcinogen or mutagen applies unless it can be shown that the substance contains less than 0,1 % w/w 1,3- butadiene (Einecs No 203-450-8), in which case a classification in accordance with Title II of this Regulation shall be performed also for those hazard classes. Where the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102)-P210-P403 shall apply.

Product subject to CLP Annex I, item 1.1.3.7. The disclosure rules of the components is modified in this case.

Full text of H- and EUH-statements: see section 16

#### Detergent Regulation (648/2004)

Ingredient data sheet		
Component	CAS-No.	%
WATER	7732-18-5	≥10%
ISOPROPYL ALCOHOL	67-63-0	≥10%

#### Ingredient data sheet

Component	CAS-No.	%
Petroleum gases, liquefied; Petroleum gas; [A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C3 through C7 and boiling in the range of approximately– 40°C to 80°C (– 40°F to 176°F).]	68476-85-7	1 - 10%
AMMONIA	1336-21-6	0.1 - 1%
Alcohols, C9-11 ethoxylated	68439-46-3	0.1 - 1%
LIMONENE	5989-27-5	<0.1%
TERPINEOL	8000-41-7	<0.1%
DIETHYL PHTHALATE	84-66-2	<0.1%
2,6-DIMETHYL-7-OCTEN-2-OL	18479-58-8	<0.1%
UNDECYLENAL	112-45-8	<0.1%
ACETYL HEXAMETHYL TETRALIN	1506-02-1	<0.1%
ISOCYCLOCITRAL	1335-66-6	<0.1%
DECANAL	112-31-2	<0.1%
ETHYL BETA-NAPHTHYL ETHER	93-18-5	<0.1%
ETHYL METHYLPHENYLGLYCIDATE	77-83-8	<0.1%
EUCALYPTOL	470-82-6	<0.1%
PINENE	80-56-8	<0.1%
MYRCENE	123-35-3	<0.1%
GAMMA-TERPINENE	99-85-4	<0.1%
P-CYMENE	99-87-6	<0.1%
BETA-CARYOPHYLLENE	87-44-5	<0.1%

#### Labelling of contents

Component	%
aliphatic hydrocarbons	≥5-<15%
perfumes	
LIMONENE	

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
First-aid measures for first aider	: First aid workers will be equipped with suitable personal protective equipment.

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

Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after inhalation	: Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.

Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: None under normal conditions.

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: Extremely flammable aerosol.
Explosion hazard	: Pressurised container: May burst if heated.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

#### 5.3. Advice for firefighters

Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.
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##### For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

##### For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Evacuate unnecessary personnel. Stop leak if safe to do so.

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

For containment	: Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
Methods for cleaning up	: Mechanically recover the product.
Other information	: Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Packaging materials	: Store always product in container of same material as original container.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### National occupational exposure and biological limit values

Diethyl phthalate (84-66-2)	
Ireland - Occupational Exposure Limits	
Local name	Diethyl phthalate
OEL TWA	5 mg/m <sup>3</sup>
OEL STEL	10 mg/m <sup>3</sup>
Regulatory reference	Chemical Agents Code of Practice 2021
Citral (5392-40-5)	
Ireland - Occupational Exposure Limits	
Local name	Citral
OEL TWA	5 ppm IFV (Inhale Fraction and Vapour)
Regulatory reference	Chemical Agents Code of Practice 2021
Propan-2-ol (67-63-0)	
Ireland - Occupational Exposure Limits	
Local name	Isopropyl alcohol [Propan-2-ol]
OEL TWA	200 ppm
OEL STEL	400 ppm
Remark	Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body)
Regulatory reference	Chemical Agents Code of Practice 2021
Ireland - Biological limit values	
Local name	2-Propanol

## Propan-2-ol (67-63-0)

BMGV	40 mg/l Parameter: acetone - Medium: urine - Sampling time: End of shift at end of workweek - Notations: B (Background), Ns (Non-specific)
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)

## 8.2. Exposure controls

### Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

### Personal protection equipment

#### Personal protective equipment:

Wear recommended personal protective equipment.

#### Personal protective equipment symbol(s):



### Eye and face protection

#### Eye protection:

Safety glasses

## Eye protection

Type	Field of application	Characteristics	Standard
Safety glasses			EN 166

### Skin protection

#### Skin and body protection:

Wear suitable protective clothing

## Skin and body protection

Type	Standard
protective clothing	EN ISO 6530

#### Hand protection:

Protective gloves

## Hand protection

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves, Reusable gloves					EN ISO 374

### Respiratory protection

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

### Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Appearance	: Aerosol. Clear liquid.
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: -40 – -2 °C (LPG)
Flammability	: Extremely flammable aerosol.
Explosive properties	: Pressurised container: May burst if heated.
Lower explosion limit	: 1.4 vol % (LPG)
Upper explosion limit	: 10.9 vol % (LPG)
Flash point	: < -40 °C
Auto-ignition temperature	: 365 °C (LPG)
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: Not available
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 590 – 1760 kPa (LPG)
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

### 9.2. Other information

#### Information with regard to physical hazard classes

% of flammable ingredients : 42.5129767524 %

#### Other safety characteristics

Volatility : Volatile

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Extremely flammable aerosol. Pressurised container: May burst if heated.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.



## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

#### (R)-p-mentha-1,8-diene (5989-27-5)

LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
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#### Pin-2(3)-ene (80-56-8)

LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))
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#### p-cymene (99-87-6)

LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Guideline: other:
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#### Citral (5392-40-5)

LD50 oral rat	≈ 6800 mg/kg bodyweight Animal: rat
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Remarks on results: other:

#### Propan-2-ol (67-63-0)

LD50 oral rat	5840 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
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Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Causes serious eye irritation.  
Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified

#### (R)-p-mentha-1,8-diene (5989-27-5)

IARC group	3 - Not classifiable
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#### Propan-2-ol (67-63-0)

IARC group	3 - Not classifiable
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#### Citral (5392-40-5)

NOAEL (chronic, oral, animal/male, 2 years)	60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Remarks on results: other:
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Reproductive toxicity : Not classified  
STOT-single exposure : May cause drowsiness or dizziness.

#### Ammonia (1336-21-6)

STOT-single exposure	May cause respiratory irritation.
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#### Propan-2-ol (67-63-0)

STOT-single exposure	May cause drowsiness or dizziness.
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STOT-repeated exposure : Not classified

#### Citral (5392-40-5)

LOAEC (inhalation, rat, gas, 90 days)	68 ppm Animal: rat, Animal sex: female
NOAEL (oral, rat, 90 days)	100 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
NOAEC (inhalation, rat, gas, 90 days)	34 ppm Animal: rat, Animal sex: female

Citral (5392-40-5)	
NOAEL (subchronic, oral, animal/male, 90 days)	60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

Petroleum gases, liquefied (Contains < 0.1% 1,3-butadiene) (68476-85-7)	
LOAEC (inhalation, rat, gas, 90 days)	12000 ppm Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:

Aspiration hazard : Not classified

R-244 GLASS & MIRROR CLEANER	
Vaporizer	Aerosol
Not able to form a pool	Yes

## 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

(R)-p-mentha-1,8-diene (5989-27-5)	
LC50 - Fish [1]	720 µg/l Test organisms (species): Pimephales promelas
LC50 - Fish [2]	702 µg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	0.307 mg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	0.51 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.32 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	0.214 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

Pin-2(3)-ene (80-56-8)	
LC50 - Fish [1]	0.303 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	0.475 mg/l Test organisms (species): Daphnia magna

Diethyl phthalate (84-66-2)	
EC50 96h - Algae [1]	85.6 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

p-cymene (99-87-6)	
LC50 - Fish [1]	48 mg/l Test organisms (species): Cyprinodon variegatus
EC50 - Crustacea [1]	3.7 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	4.03 mg/l Test organisms (species): Scenedesmus capricornutum
EC50 72h - Algae [2]	2.01 mg/l Test organisms (species): Scenedesmus capricornutum

<b>Citral (5392-40-5)</b>	
LC50 - Fish [1]	6.78 mg/l Test organisms (species): Leuciscus idus
EC50 - Crustacea [1]	6.8 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	103.8 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

<b>Petroleum gases, liquefied (Contains &lt; 0.1% 1,3-butadiene) (68476-85-7)</b>	
LC50 - Fish [1]	0.362 mg/l
EC50 - Crustacea [1]	0.018 mg/l
ErC50 algae	7.6 mg/l Source: ECOTOX

## 12.2. Persistence and degradability

<b>R-244 GLASS &amp; MIRROR CLEANER</b>	
Persistence and degradability	Not rapidly degradable

<b>Ammonia (1336-21-6)</b>	
Persistence and degradability	Not rapidly degradable

<b>(R)-p-mentha-1,8-diene (5989-27-5)</b>	
Persistence and degradability	Not rapidly degradable

<b>Pin-2(3)-ene (80-56-8)</b>	
Persistence and degradability	Not rapidly degradable

<b>Diethyl phthalate (84-66-2)</b>	
Persistence and degradability	Not rapidly degradable

<b>p-cymene (99-87-6)</b>	
Persistence and degradability	Not rapidly degradable

<b>Citral (5392-40-5)</b>	
Persistence and degradability	Not rapidly degradable

<b>Propan-2-ol (67-63-0)</b>	
Persistence and degradability	Rapidly degradable
Biodegradation	95 %

<b>Petroleum gases, liquefied (Contains &lt; 0.1% 1,3-butadiene) (68476-85-7)</b>	
Persistence and degradability	Rapidly degradable

## 12.3. Bioaccumulative potential

<b>Petroleum gases, liquefied (Contains &lt; 0.1% 1,3-butadiene) (68476-85-7)</b>	
Partition coefficient n-octanol/water (Log Pow)	≤ 2.8 Source: IUCLID

## 12.4. Mobility in soil

No additional information available

## 12.5. Results of PBT and vPvB assessment

No additional information available

## 12.6. Endocrine disrupting properties

No additional information available

## 12.7. Other adverse effects

No additional information available






## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.
HP Code	: HP3 - "Flammable:" – flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C; – flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air; – flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction; – flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa; – water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities; – other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste. HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
UN 1950	UN 1950	UN 1950	UN 1950	UN 1950
<b>14.2. UN proper shipping name</b>				
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS	AEROSOLS
<b>Transport document description</b>				
UN 1950 AEROSOLS, 2.1, (D)	UN 1950 AEROSOLS, 2.1	UN 1950 Aerosols, flammable, 2.1	UN 1950 AEROSOLS, 2.1	UN 1950 AEROSOLS, 2.1
<b>14.3. Transport hazard class(es)</b>				
2.1	2.1	2.1	2.1	2.1
				
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

ADR	IMDG	IATA	ADN	RID
<b>14.5. Environmental hazards</b>				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No EmS-No. (Fire): F-D EmS-No. (Spillage): S-U	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

#### 14.6. Special precautions for user

##### Overland transport

Classification code (ADR)	: 5F
Special provisions (ADR)	: 190, 327, 344, 625
Limited quantities (ADR)	: 1L
Excepted quantities (ADR)	: E0
Packing instructions (ADR)	: P207, LP200
Special packing provisions (ADR)	: PP87, RR6, L2
Mixed packing provisions (ADR)	: MP9
Transport category (ADR)	: 2
Special provisions for carriage - Packages (ADR)	: V14
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV9, CV12
Special provisions for carriage - Operation (ADR)	: S2
Tunnel restriction code (ADR)	: D

##### Transport by sea

Special provisions (IMDG)	: 63, 190, 277, 327, 344, 381, 959
Limited quantities (IMDG)	: SP277
Excepted quantities (IMDG)	: E0
Packing instructions (IMDG)	: P207, LP200
Special packing provisions (IMDG)	: PP87, L2
Stowage category (IMDG)	: None
Stowage and handling (IMDG)	: SW1, SW22
Segregation (IMDG)	: SG69

##### Air transport

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Y203
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 203
PCA max net quantity (IATA)	: 75kg
CAO packing instructions (IATA)	: 203
CAO max net quantity (IATA)	: 150kg
Special provisions (IATA)	: A145, A167, A802
ERG code (IATA)	: 10L

##### Inland waterway transport

Classification code (ADN)	: 5F
Special provisions (ADN)	: 190, 327, 344, 625
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E0
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01, VE04
Number of blue cones/lights (ADN)	: 1

##### Rail transport

Classification code (RID)	: 5F
Special provisions (RID)	: 190, 327, 344, 625
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E0

Packing instructions (RID) : P207, LP200  
Special packing provisions (RID) : PP87, RR6, L2  
Mixed packing provisions (RID) : MP9  
Transport category (RID) : 2  
Special provisions for carriage – Packages (RID) : W14  
Special provisions for carriage - Loading, unloading and handling (RID) : CW9, CW12  
Colis express (express parcels) (RID) : CE2  
Hazard identification number (RID) : 23

## 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

#### EU-Regulations

##### REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

##### REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

##### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

##### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

##### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

##### Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

##### Detergent Regulation (648/2004)

##### Allergenic fragrances > 0.01 %:

LIMONENE

##### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

##### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

### Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate

## Abbreviations and acronyms:

BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

## Full text of H- and EUH-statements:

Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3

**Full text of H- and EUH-statements:**

Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Gas 1A	Flammable gases, Category 1A
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H304	May be fatal if swallowed and enters airways.
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.
H335	May cause respiratory irritation.
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.
Press. Gas	Gases under pressure
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:**

Aerosol 1	H222;H229	Expert judgement
Eye Irrit. 2	H319	Expert judgement
STOT SE 3	H336	Expert judgement

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.