

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : Brake Cleaner  
Product code : VC1269

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

##### Relevant identified uses

Main use category : Industrial use, Professional use  
Use of the substance/mixture : Cleaning/washing agents and additives

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

##### Supplier

Valet-Chem Ltd  
Summit Close  
NG17 8GJ Kirkby In Ashfield Nottingham, Nottinghamshire  
United Kingdom  
T T +44 (0) 844 414 0987  
[info@valetchem.co.uk](mailto:info@valetchem.co.uk)

##### Supplier information

Leading Solvents Ireland Ltd  
The Courtyard, Manor House  
3 Church Road  
Malahide, Co. Dublin  
Ireland  
T +353 1 845 7660

#### 1.4. Emergency telephone number

Emergency number : +44 (0) 844 414 0987 (Office hours only)

Country/Area	Organisation	Emergency number
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)
United Kingdom	NHS 111/NHS 24/NHS Direct.	111 0845 4647 or call a doctor

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

Flammable liquids, Category 2 H225  
Serious eye damage/eye irritation, Category 2 H319  
Carcinogenicity, Category 2 H351  
Specific target organ toxicity – Single exposure, Category 3, H336  
Narcosis  
Aspiration hazard, Category 1 H304  
Hazardous to the aquatic environment – Chronic Hazard, H411  
Category 2

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

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

See section 11 for toxicological information. See section 9/10 for physicochemical information. See section 12 for environmental information.

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### 2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Contains

: Propan-2-ol; Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics; Methyl isobutyl ketone

Hazard statements (CLP)

: H225 - Highly flammable liquid and vapour.  
H304 - May be fatal if swallowed and enters airways.  
H319 - Causes serious eye irritation.  
H336 - May cause drowsiness or dizziness.  
H351 - Suspected of causing cancer.  
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP)

: P201 - Obtain special instructions before use.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P261 - Avoid breathing mist, spray, vapours.  
P271 - Use only outdoors or in a well-ventilated area.  
P273 - Avoid release to the environment.  
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.  
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .  
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308+P313 - IF exposed or concerned: Get medical advice/attention.  
P312 - Call a POISON CENTRE or doctor if you feel unwell.  
P331 - Do NOT induce vomiting.  
P370+P378 - In case of fire: Use alcohol resistant foam, dry extinguishing powder, carbon dioxide (CO<sub>2</sub>) to extinguish.  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 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]
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	EC-No.: 920-750-0 REACH-no: 01-2119473851-33	$\geq 50 - < 70$	Flam. Liq. 2, H225 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Methyl isobutyl ketone substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 108-10-1 EC-No.: 203-550-1 EC Index-No.: 606-004-00-4 REACH-no: 01-2119473980-30	≥ 10 – < 20	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H336 STOT SE 3, H335 EUH066
2-methoxy-1-methylethyl acetate substance with national workplace exposure limit(s) (GB, IE); substance with a Community workplace exposure limit	CAS-No.: 108-65-6 EC-No.: 203-603-9 EC Index-No.: 607-195-00-7 REACH-no: 01-2119475791-29	≥ 10 – < 20	Flam. Liq. 3, H226
Propan-2-ol substance with national workplace exposure limit(s) (DE, GB, NL)	CAS-No.: 67-63-0 EC-No.: 200-661-7 EC Index-No.: 603-117-00-0 REACH-no: 01-2119451558-25	≥ 5 – < 10	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Take off all contaminated clothing immediately . Wash contaminated clothing before reuse.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.
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	: Rinse mouth out with water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting unless directed to do so by a physician. Call a physician immediately.

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

Symptoms/effects after inhalation	: Inhalation may cause irritation (cough, short breathing, difficulty in breathing).
Symptoms/effects after skin contact	: irritation (itching, redness, blistering).
Symptoms/effects after eye contact	: redness, itching, tears. Causes eye irritation. stinging.
Symptoms/effects after ingestion	: May cause irritation to the digestive tract.

### 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	: high volume water jet.

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

- Fire hazard : Highly flammable liquid and vapour. The vapour may be invisible, heavier than air and spread along ground. Vapours may form explosive mixture with air. Flash back possible over considerable distance. Heating will cause a rise in pressure with a risk of bursting.
- Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

- Precautionary measures fire : Evacuate area.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
- Other information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

## SECTION 6: Accidental release measures

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

- General measures : Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Stop leak if safe to do so.
- For non-emergency personnel**
- Protective equipment : Use personal protective equipment as required. Keep away unprotected persons. Do not breathe gas, fumes, vapour or spray.
- Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. 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".

### 6.2. Environmental precautions

Avoid release to the environment. Do not flush into surface water or sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities.

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

- Methods for cleaning up : Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

### 6.4. Reference to other sections

See Section 1 for emergency contact information.  
See Section 8 for information on personal protective equipment.  
See Section 13 for waste treatment information.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe gas, fumes, vapour or spray.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Technical measures	: Ground/bond container and receiving equipment. Take precautionary measures against static discharge.
Storage conditions	: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Keep in an area equipped with solvent resistant flooring.
Incompatible materials	: Store away from incompatible materials (see section 10).
Heat and ignition sources	: The vapour may be invisible, heavier than air and spread along ground. Can form explosive mixture with air.
Information on mixed storage	: Keep away from food, drink and animal feedingstuffs.
Storage area	: Store away from heat.
Packaging materials	: Keep only in the original container in a cool, well-ventilated place away from combustible materials.

### 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

Propan-2-ol (67-63-0)	
United Kingdom - Occupational Exposure Limits	
Local name	Propan-2-ol
WEL TWA (OEL TWA)	999 mg/m <sup>3</sup>
	400 ppm
WEL STEL (OEL STEL)	1250 mg/m <sup>3</sup>
	500 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Methyl isobutyl ketone (108-10-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	4-Methylpentan-2-one
IOEL TWA	83 mg/m <sup>3</sup>
	20 ppm
IOEL STEL	208 mg/m <sup>3</sup>
	50 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
United Kingdom - Occupational Exposure Limits	
Local name	4-Methylpentan-2-one
WEL TWA (OEL TWA)	208 mg/m <sup>3</sup>
	50 ppm
WEL STEL (OEL STEL)	416 mg/m <sup>3</sup>
	100 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

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Methyl isobutyl ketone (108-10-1)	
<b>United Kingdom - Biological limit values</b>	
Local name	4-methylpentan-2-one
BMGV	20 µmol/l Parameter: 4-methylpentan-2-one - Medium: urine - Sampling time: Post shift
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
2-methoxy-1-methylethyl acetate (108-65-6)	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	2-Methoxy-1-methylethylacetate
IOEL TWA	275 mg/m <sup>3</sup>
	50 ppm
IOEL STEL	550 mg/m <sup>3</sup>
	100 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
<b>Ireland - Occupational Exposure Limits</b>	
OEL TWA	275 mg/m <sup>3</sup>
	50 ppm
OEL STEL	550 mg/m <sup>3</sup>
	100 ppm
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	1-Methoxypropyl acetate
WEL TWA (OEL TWA)	274 mg/m <sup>3</sup>
	50 ppm
WEL STEL (OEL STEL)	548 mg/m <sup>3</sup>
	100 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

## 8.2. Exposure controls

### Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station. Provide sufficient air exchange and/or exhaust.

### Personal protection equipment

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



### Eye and face protection

#### Eye protection:

Safety glasses

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Eye protection			
Type	Field of application	Characteristics	Standard
Safety glasses, Safety goggles	Dust, Fine dust, Liquid, Droplet, spray	With side shields	EN 166

### Skin protection

#### Skin and body protection:

Wear suitable protective clothing

#### Hand protection:

Protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Protective gloves should be replaced at first signs of wear.

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Butyl rubber, Viton, Nitrile rubber, Neoprene	6 (> 480 minutes)	≥ 0.5		EN ISO 374

### Respiratory protection

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Respiratory protection			
Device	Filter type	Condition	Standard
	Type A - High-boiling (>65 °C) organic compounds	Protection for Liquid particles, Vapour protection	EN 14387

### 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	: Not available
Appearance	: clear.
Odour	: Solvent.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not applicable
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: 0 °C (closed cup, estimated based on lowest component)
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: Not available
Solubility	: insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available

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Relative density : Not available  
Relative vapour density at 20°C : Not available  
Particle characteristics : Not applicable

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Highly flammable liquid and vapour.

### 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. Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

### 10.5. Incompatible materials

Combustible materials. Oxidizing agent. Strong acids. Strong bases.

### 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

Propan-2-ol (67-63-0)	
LD50 oral	5840 mg/kg
LD50 dermal	13900 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	25000 mg/l/4h
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	
LD50 oral rat	5841 mg/kg
LD50 dermal rat	2920 mg/kg
LC50 Inhalation - Rat	23.3 mg/l
Methyl isobutyl ketone (108-10-1)	
LD50 oral rat	2080 mg/kg
LD50 dermal rabbit	> 2000 mg/kg Dermal, Rabbit OECD 402
2-methoxy-1-methylethyl acetate (108-65-6)	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: other:

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Skin corrosion/irritation : Not classified

Propan-2-ol (67-63-0)	
pH	5.5
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	
pH	4.5
Methyl isobutyl ketone (108-10-1)	
pH	4.5
2-methoxy-1-methylethyl acetate (108-65-6)	
pH	7

Serious eye damage/irritation : Causes serious eye irritation.

Propan-2-ol (67-63-0)	
pH	5.5
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	
pH	4.5
Methyl isobutyl ketone (108-10-1)	
pH	4.5
2-methoxy-1-methylethyl acetate (108-65-6)	
pH	7

Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Suspected of causing cancer.  
Reproductive toxicity : Not classified

Methyl isobutyl ketone (108-10-1)	
NOAEL (animal/male, F0/P)	4093 mg/kg

STOT-single exposure : May cause drowsiness or dizziness.

Propan-2-ol (67-63-0)	
STOT-single exposure	May cause drowsiness or dizziness.
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	
STOT-single exposure	May cause drowsiness or dizziness.
Methyl isobutyl ketone (108-10-1)	
STOT-single exposure	May cause drowsiness or dizziness. May cause respiratory irritation.

STOT-repeated exposure : Not classified

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	
LOAEC (inhalation, rat, vapour, 90 days)	4.71 mg/l air Animal: rat, Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity:90-Day Study)
NOAEC (inhalation, rat, vapour, 90 days)	2355 mg/l air Animal: rat, Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity:90-Day Study)
Methyl isobutyl ketone (108-10-1)	
LOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)

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Methyl isobutyl ketone (108-10-1)	
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, vapour, 90 days)	4106 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
2-methoxy-1-methylethyl acetate (108-65-6)	
NOAEL (dermal, rat/rabbit, 90 days)	> 1000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

Aspiration hazard : May be fatal if swallowed and enters airways.

Propan-2-ol (67-63-0)	
Viscosity, kinematic	3.115 mm <sup>2</sup> /s
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	
Viscosity, kinematic	0.69 mm <sup>2</sup> /s
Methyl isobutyl ketone (108-10-1)	
Viscosity, kinematic	0.689 mm <sup>2</sup> /s
2-methoxy-1-methylethyl acetate (108-65-6)	
Viscosity, kinematic	1.237 mm <sup>2</sup> /s

### 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) : Toxic to aquatic life with long lasting effects.

Propan-2-ol (67-63-0)	
LC50 - Fish [1]	9640 mg/l
LC50 - Fish [2]	9640 mg/l Test organisms (species): Pimephales promelas
EC50 - Other aquatic organisms [1]	13299 mg/l waterflea
EC50 - Other aquatic organisms [2]	> 1000 mg/l
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	
LC50 - Fish [1]	> 3 mg/l
EC50 - Other aquatic organisms [1]	4.6 mg/l waterflea
EC50 - Other aquatic organisms [2]	10 mg/l
EC50 72h - Algae [1]	32 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

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<b>Methyl isobutyl ketone (108-10-1)</b>	
LC50 - Fish [1]	> 179 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	> 200 mg/l Test organisms (species): Daphnia magna
NOEC chronic crustacea	30 mg/l
<b>2-methoxy-1-methylethyl acetate (108-65-6)</b>	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Oryzias latipes
EC50 - Crustacea [1]	> 500 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 1000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	≥ 100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	47.5 mg/l Test organisms (species): Oryzias latipes Duration: '14 d'

### 12.2. Persistence and degradability

<b>Brake Cleaner</b>	
Persistence and degradability	Not rapidly degradable
<b>Propan-2-ol (67-63-0)</b>	
Persistence and degradability	Not rapidly degradable
<b>Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics</b>	
Persistence and degradability	Not rapidly degradable
<b>Methyl isobutyl ketone (108-10-1)</b>	
Persistence and degradability	Not rapidly degradable
<b>2-methoxy-1-methylethyl acetate (108-65-6)</b>	
Persistence and degradability	Not rapidly degradable

### 12.3. Bioaccumulative potential

<b>Propan-2-ol (67-63-0)</b>	
Partition coefficient n-octanol/water (Log Pow)	0.05
<b>Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics</b>	
Partition coefficient n-octanol/water (Log Pow)	4.85
<b>Methyl isobutyl ketone (108-10-1)</b>	
Partition coefficient n-octanol/water (Log Pow)	1.9

### 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

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### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions. Disposal together with normal waste is not allowed.
Product/Packaging disposal recommendations	: Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services. This product shall be disposed of or recovered in compliance with Directive 2008/98/EC on waste as lastly amended.
Additional information	: Flammable vapours may accumulate in the container.
HP Code	: <ul style="list-style-type: none"> <li>HP3 - "Flammable:"                         <ul style="list-style-type: none"> <li>– 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 &gt; 55 °C and ≤ 75 °C;</li> <li>– 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;</li> <li>– flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;</li> <li>– flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;</li> <li>– water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;</li> <li>– other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.</li> </ul> </li> <li>HP7 - "Carcinogenic:" waste which induces cancer or increases its incidence</li> <li>HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment</li> </ul>

### 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 1993	UN 1993	UN 1993	UN 1993	UN 1993
<b>14.2. UN proper shipping name</b>				
FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics ; Methyl isobutyl ketone)	FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics ; Methyl isobutyl ketone)	Flammable liquid, n.o.s. (Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics ; Methyl isobutyl ketone)	FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics ; Methyl isobutyl ketone)	FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics ; Methyl isobutyl ketone)
<b>Transport document description</b>				
UN 1993 FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics ; Methyl isobutyl ketone), 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS	UN 1993 FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics ; Methyl isobutyl ketone), 3, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 1993 Flammable liquid, n.o.s. (Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics ; Methyl isobutyl ketone), 3, II, ENVIRONMENTALLY HAZARDOUS	UN 1993 FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics ; Methyl isobutyl ketone), 3, II, ENVIRONMENTALLY HAZARDOUS	UN 1993 FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics ; Methyl isobutyl ketone), 3, II, ENVIRONMENTALLY HAZARDOUS
<b>14.3. Transport hazard class(es)</b>				
3	3	3	3	3

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ADR	IMDG	IATA	ADN	RID
<b>14.4. Packing group</b>				
II	II	II	II	II
<b>14.5. Environmental hazards</b>				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes EmS-No. (Fire): F-E EmS-No. (Spillage): S-E	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR)	: F1
Special provisions (ADR)	: 274, 601, 640D
Limited quantities (ADR)	: 1I
Excepted quantities (ADR)	: E2
Packing instructions (ADR)	: P001, IBC02, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T7
Portable tank and bulk container special provisions (ADR)	: TP1, TP8, TP28
Tank code (ADR)	: LGBF
Vehicle for tank carriage	: FL
Transport category (ADR)	: 2
Special provisions for carriage - Operation (ADR)	: S2, S20
Hazard identification number (Kemler No.)	: 33
Orange plates	:  
Tunnel restriction code (ADR)	: D/E
EAC code	: •3YE

#### Transport by sea

Special provisions (IMDG)	: 274
Limited quantities (IMDG)	: 1 L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP1, TP28, TP8
Stowage category (IMDG)	: B

#### Air transport

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y341
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 353
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 364
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A3
ERG code (IATA)	: 3H

#### Inland waterway transport

Classification code (ADN)	: F1
Special provisions (ADN)	: 274, 601, 640D

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Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E2
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 1

### Rail transport

Classification code (RID)	: F1
Special provisions (RID)	: 274, 601, 640D
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P001, IBC02, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T7
Portable tank and bulk container special provisions (RID)	: TP1, TP8, TP28
Tank codes for RID tanks (RID)	: LGBF
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: CE7
Hazard identification number (RID)	: 33

### 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 (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 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

##### Explosives Precursors Regulation (EU 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 (EC 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

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### 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
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 Abstracts 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. 4 (Inhalation)	Acute toxicity (inhal.), Category 4

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Full text of H- and EUH-statements:	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

The classification complies with : ATP 12

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.