

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product form : Mixture  
Trade name : CleanTech EM  
Product code : VW.30.01  
Product group : Trade product

**1.2. Relevant identified uses of the substance or mixture and uses advised against****1.2.1. Relevant identified uses**

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

**1.2.2. Uses advised against**

No additional information available

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

VatOil  
Dollegoorweg 15  
7602 EC Almelo - Netherlands  
T 0031 (0)546 81 81 65  
[vib@vatoil.com](mailto:vib@vatoil.com)

**1.4. Emergency telephone number**

Country	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)	
United Kingdom	National Poisons Information Service (Cardiff Centre) Gwenwyn Ward, Llandough Hospital	Penarth CF64 2XX Cardiff	0344 892 0111	

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Aspiration hazard, Category 1 H304  
Full text of H statements : see section 16

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

May be fatal if swallowed and enters airways.

**2.2. Label elements****Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard pictograms (CLP) :



GHS08

Signal word (CLP) : Danger

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Contains	: Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics
Hazard statements (CLP)	: H304 - May be fatal if swallowed and enters airways.
Precautionary statements (CLP)	: P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. P301+P310+P331 - IF SWALLOWED: Immediately call a doctor. Do NOT induce vomiting. P405 - Store locked up. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
EUH-statements	: EUH066 - Repeated exposure may cause skin dryness or cracking.

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	(EC-No.) 926-141-6 (REACH-no) 01-2119456620-43	≥ 80	Asp. Tox. 1, H304
Alcohols, C9-11, ethoxylated	(CAS-No.) 68439-46-3 (EC-No.) 614-482-0	1 – 2,5	Eye Irrit. 2, H319
2-methylpropan-1-ol substance with national workplace exposure limit(s) (GB)	(CAS-No.) 78-83-1 (EC-No.) 201-148-0 (EC Index-No.) 603-108-00-1 (REACH-no) 01-2119484609-23	0,1 – 1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
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 eyes with water as a precaution.
First-aid measures after ingestion	: Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects	: No additional information available. Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after skin contact	: Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after ingestion	: Risk of lung oedema. May result in aspiration into the lungs, causing chemical pneumonia.

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

Treat symptomatically.

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### 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 : Combustible liquid.  
Hazardous decomposition products in case of fire : Toxic fumes may be released. Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.

#### 5.3. Advice for firefighters

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

##### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

##### 6.1.2. 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.

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

Methods for cleaning up : Take up liquid spill into absorbent material.  
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

Precautions for safe handling : Provide good ventilation in process area to prevent formation of vapour.  
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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

Storage conditions : Keep container closed when not in use. Keep in a cool, well-ventilated place away from heat.  
Storage temperature : 0 – 40 °C

#### 7.3. Specific end use(s)

No additional information available

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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### CleanTech EM

##### EU - Occupational Exposure Limits

Exposure limits/standards for materials that can be formed when handling this product. When mists/aerosols can occur the following is recommended	5 mg/m <sup>3</sup> - ACGIH TLV (inhalable fraction).
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##### 2-methylpropan-1-ol (78-83-1)

##### United Kingdom - Occupational Exposure Limits

Local name	2-Methylpropan-1-ol
WEL TWA (mg/m <sup>3</sup> )	154 mg/m <sup>3</sup>
WEL TWA (ppm)	50 ppm
WEL STEL (mg/m <sup>3</sup> )	231 mg/m <sup>3</sup>
WEL STEL [ppm]	75 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

#### 8.2. Exposure controls

##### Appropriate engineering controls:

Ensure good ventilation of the work station.

##### Materials for protective clothing:

Wear suitable protective clothing

##### Hand protection:

Protective gloves

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	≥ 0.35		EN ISO 374

##### Eye protection:

Safety glasses

Type	Use	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166

##### Skin and body protection:

Wear suitable protective clothing

##### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

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### Personal protective equipment symbol(s):



### 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	: red.
Odour	: characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: -45 °C - ASTM D5950 (pour point)
Boiling point	: No data available
Flash point	: 72 °C - ASTM D93 (PM)
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0,798 kg/l (15 °C) - ASTM D4052
Solubility	: Emulsifiable in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: 1,6 mm <sup>2</sup> /s (40 °C) - ASTM D7279
Viscosity, dynamic	: No data available
Explosive properties	: Presents no particular fire or explosion hazard.
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

VOC content : 0 %

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Reacts violently with (strong) oxidizers.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

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### 10.6. Hazardous decomposition products

No decomposition if stored normally.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

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

#### 2-methylpropan-1-ol (78-83-1)

LD50 oral rat	2830 mg/kg
LD50 dermal rabbit	2460 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	24,6 mg/l/4h

#### Alcohols, C9-11, ethoxylated (68439-46-3)

LD50 oral rat	> 5000 mg/kg
LD50 dermal	> 2000 mg/kg
LC50 Inhalation - Rat	> 20 mg/l

#### Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401 method)
LD50 dermal rabbit	> 5000 mg/kg bodyweight 24h - (OECD 402 method)
LC50 Inhalation - Rat	> 5000 mg/m <sup>3</sup> 8h - vapours (OECD 403 method)

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Not classified  
Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

#### 2-methylpropan-1-ol (78-83-1)

NOAEL (oral, rat, 90 days)	> 1450 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
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Aspiration hazard : May be fatal if swallowed and enters airways.

#### CleanTech EM

Viscosity, kinematic	1,6 mm <sup>2</sup> /s (40 °C) - ASTM D7279
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### 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

2-methylpropan-1-ol (78-83-1)	
LC50 fish	1430 mg/l (Pimephales promelas, 96h)
EC50 Daphnia	1030 mg/l (Daphnia magna, 48h)
NOEC (chronic)	20 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

Alcohols, C9-11, ethoxylated (68439-46-3)	
LC50 fish	1 – 10 mg/l 96h
EC50 Daphnia	1 – 10 mg/l 48h
ErC50 (algae)	1 – 10 mg/l 72h

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	
LC50 fish	> 1000 mg/l (OECD 203 method)
EC50 Daphnia	> 1000 mg/l (OECD 202 method)
EC50 72h algae (1)	> 1000 mg/l (OECD 201 method)
NOEC chronic crustacea	1,22 g/l (21d)
NOEC chronic algae	1000 mg/l (OECD 201 method)

#### 12.2. Persistence and degradability

Alcohols, C9-11, ethoxylated (68439-46-3)	
Persistence and degradability	Readily biodegradable.
BOD (% of ThOD)	> 60 % ThOD 28 d, Closed Bottle Test (OECD 301D)

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	
Biodegradation	69 % (28d) (OECD 301F method)

#### 12.3. Bioaccumulative potential

2-methylpropan-1-ol (78-83-1)	
Partition coefficient n-octanol/water (Log Pow)	0,79

Alcohols, C9-11, ethoxylated (68439-46-3)	
Partition coefficient n-octanol/water (Log Pow)	2,4
Bioaccumulative potential	Bioaccumulation unlikely.

#### 12.4. Mobility in soil

No additional information available

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### 12.5. Results of PBT and vPvB assessment

#### Component

Alcohols, C9-11, ethoxylated (68439-46-3)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII  
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Do not allow into drains or water courses. Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.  
European List of Waste (LoW) code : 11 01 99 - wastes not otherwise specified

## SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.2. UN proper shipping name</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Not applicable

#### Transport by sea

Not applicable

#### Air transport

Not applicable

#### Inland waterway transport

Not applicable

#### Rail transport

Not applicable

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

Not applicable



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### SECTION 15: Regulatory information

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

##### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content : 0 %  
Child-resistant fastening : Applicable  
Tactile warning : Applicable

##### 15.1.2. National regulations

No additional information available

#### 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
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
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
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail

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vPvB	Very Persistent and Very Bioaccumulative
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
EC-No.	European Community number
EN	European Standard
OEL	Occupational Exposure Limit
SDS	Safety Data Sheet
WGK	Water Hazard Class

Full text of H- and EUH-statements:	
Asp. Tox. 1	Aspiration hazard, Category 1
EUH066	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
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.
EUH066	Repeated exposure may cause skin dryness or cracking.

SDS EU (REACH Annex II)

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.