

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 3-7-2018 Revision date: 24-6-2024 Supersedes version of: 20-3-2024 Version: 3.2

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

1.1. Product identifier

Product form	:	Mixture
Trade name	:	VatTex MultiCool -38
UFI	:	QJ40-K992-T00N-2D1R
Product code	:	VC.10.02
Type of product	:	Heat Transfer Fluids
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 Use of the substance/mixture Function or use category

- : Industrial use, Professional use, Consumer use
- : Antifreeze and coolant : Anti-freezing agents
- 1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

VatOil Dollegoorweg 15 NL 7602 EC Almelo Netherlands T 0031 (0)546 81 81 65 vib@vatoil.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	+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) University Hospital Llandough	Penlan Road CF64 2XX	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute toxicity (oral), Category 4	H302	
Skin corrosion/irritation, Category 2	H315	
Serious eye damage/eye irritation, Category 2	H319	
Specific target organ toxicity – Repeated exposure, Category 2 H373		
Full text of H- and EUH-statements: see section 16		

Adverse physicochemical, human health and environmental effects

May cause damage to organs through prolonged or repeated exposure. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation.

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2.2. Label elements

Labelling according to Regulation (EC) No. 127	2/2008 [CLP]
Hazard pictograms (CLP)	GHS07 GHS08
Signal word (CLP)	: Warning
Contains	: 1,2-ethanediol: Potassium 3,5,5-trimethylhexanoate
Hazard statements (CLP)	: H302 - Harmful if swallowed.
	H315 - Causes skin irritation.
	H319 - Causes serious eye irritation.
	H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (if swallowed).
Precautionary statements (CLP)	: P101 - If medical advice is needed, have product container or label at hand.
	P102 - Keep out of reach of children.
	P260 - Do not breathe vapours, mist.
	P270 - Do not eat, drink or smoke when using this product.
	P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing 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.
	P314 - Get medical advice/attention if you feel unwell.
	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 ≥ 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

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,2-ethanediol	CAS-No.: 107-21-1 EC-No.: 203-473-3 EC Index-No.: 603-027-00-1 REACH-no: 01-2119456816- 28	< 80	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Potassium 3,5,5-trimethylhexanoate	CAS-No.: 93918-10-6 EC-No.: 299-890-3 REACH-no: 01-2120747787- 36	< 2,5	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318

Comments

: The product has a bitter taste for safety reasons, in case it is swallowed accidentally Full text of H- and EUH-statements: see section 16

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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	 Remove contaminated clothes. Wash skin with plenty of water. 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. Do NOT induce vomiting. Get medical advice/attention.
4.2. Most important symptoms and effe	ects, both acute and delayed
Symptoms/effects after inhalation	: Inhalation may affect the nervous system causing headache, possibly dizziness, nausea, weakness, loss of coordination and unconsciousness.
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: Ingestion may cause nausea, vomiting and diarrhea.

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 Unsuitable extinguishing media	Water spray. Dry powder. Foam. Carbon dioxide.Do not use a heavy water stream.
5.2. Special hazards arising from the subs	tance or mixture
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	 No fire hazard. No direct explosion hazard. Toxic fumes may be released.
5.3. Advice for firefighters	
Firefighting instructions Protection during firefighting	 Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. 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 equip	ment 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.			
6.1.1. For non-emergency personnel				
Protective equipment Emergency procedures	 Wear recommended personal protective equipment. Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. 			
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".			
Emergency procedures	: Evacuate unnecessary personnel. Stop leak if safe to do so.			
6.2. Environmental precautions				
Avoid release to the environment.				

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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	: 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	e
7.1. Precautions for safe handling	
Additional hazards when processed Precautions for safe handling	 Not expected to present a significant hazard under anticipated conditions of normal use. Ensure good ventilation of the work station. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, inclu	uding any incompatibilities
Technical measures Storage conditions Packaging materials	 Keep in a cool, well-ventilated place away from heat. Keep cool. Protect from sunlight. 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

8.1.1 National occupational exposure and biological limit values

1,2-ethanediol (107-21-1)		
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA) 52 mg/m ³ vapour		
8.1.2. Recommended monitoring procedures		
N Constant and the Communication of the United States		

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

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8.2.2. Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety glasses

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Eye protection			
Type Field of application Characteristics			
Safety glasses	Droplet	clear	EN 166

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

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

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties		
9.1. Information on basic physic	al and chemical properties	
Physical state	: Liquid	
Colour	: light yellow.	
Odour	: odourless.	
Odour threshold	: Not available	
Melting point	: Not applicable	
Freezing point	: Not available	
Boiling point	: 100 – 197 °C	
Flammability	: Not applicable	
Lower explosion limit	: 3,2 vol %	
Upper explosion limit	: 53 vol %	
Flash point	: 111 °C Derived from flash point MEG (CAS: 107-21-1). Because of the presence of water, a	
	flashpoint cannot be measured.	
Auto-ignition temperature	: Not available	

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9.2. Other information

No additional information available

9.2.2. Other safety characteristics		
Relative evaporation rate (butylacetate=1)	:	2500
VOC content	:	514,63 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

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

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

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

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 (dermal)	Harmful if swallowed. Not classified Not classified	
ATE CLP (oral)	961,538 mg/kg bodyweight	
Potassium 3,5,5-trimethylhexanoate (93918-10-6)		
LD50 oral rat	≥ 1160 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)	

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1,2-ethanediol (107-21-1)	
LD50 oral rat	7712 mg/kg bodyweight
LD50 oral	There is a marked difference in acute oral toxicity between rodents and man, man being more susceptible than rodents. The estimated fatal dose for man is 30-100 milliliters. This material has also been shown to be toxic and potentially lethal by ingestion to cats and dogs.
LD50 dermal	3500 mg/kg bodyweight mouse
LC50 Inhalation - Rat	> 2,5 mg/l
Skin corrosion/irritation	: Causes skin irritation. pH: 8
Serious eye damage/irritation	: Causes serious eye irritation. pH: 8
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
1,2-ethanediol (107-21-1)	
NOAEL (chronic, oral, animal/male, 2 years)	1500 mg/kg bodyweight Animal: mouse, Animal sex: male, Remarks on results: other:Effect type: carcinogenicity (migrated information)
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: May cause damage to organs (kidneys) through prolonged or repeated exposure (if swallowed).
1,2-ethanediol (107-21-1)	
STOT-repeated exposure	May cause damage to organs (kidneys) through prolonged or repeated exposure (if swallowed).
Aspiration hazard	: Not classified
VatTex MultiCool -38	
Viscosity, kinematic	1 mm²/s (40 °C) - ASTM D7042
1,2-ethanediol (107-21-1)	
Viscosity, kinematic	14,505 mm²/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)	Not classified
Potassium 3,5,5-trimethylhexanoate (93918-	10-6)
EC50 72h - Algae [1]	189,87 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)

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1,2-ethanediol (107-21-1)	
LC50 - Fish [1]	72860 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [1]	3536 mg/l Test organisms (species): other:grenn algae
EC50 96h - Algae [2]	6500 – 13000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	≥ 1000 mg/l Test organisms (species): Americamysis bahia (previous name: Mysidopsis bahia) Duration: '23 d'

12.2. Persistence and degradability

VatTex MultiCool -38		
Persistence and degradability	Biodegradable.	
Potassium 3,5,5-trimethylhexanoate (93918-10-6)		
Persistence and degradability	Not rapidly degradable	
1,2-ethanediol (107-21-1)		
Persistence and degradability	Rapidly degradable	
Biodegradation	90 % > 10d (OECD 301A method)	
12.3. Bioaccumulative potential		
1,2-ethanediol (107-21-1)		
Partition coefficient n-octanol/water (Log Kow)	-1,36	
12.4. Mobility in soil		
1,2-ethanediol (107-21-1)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1	
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 Waste treatment methods Sewage disposal recommendations Product/Packaging disposal recommendations Additional information European List of Waste (LoW, EC 2000/532)	 Disposal must be done according to official regulations. Dispose of contents/container in accordance with licensed collector's sorting instructions. Disposal must be done according to official regulations. Disposal must be done according to official regulations. Do not re-use empty containers. 16 01 14* - antifreeze fluids containing dangerous substances 		

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HP Code	: HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause
	specific target organ toxicity either from a single or repeated exposure, or which cause
	acute toxic effects following aspiration.
	HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal
	administration, or inhalation exposure.
	HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin
	irritation or damage to the eye.

SECTION 14: Transport information

4.1. UN number of ID n	14.1. UN number or ID number			
lot regulated for transport				
4.2. UN proper shipping	g name			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
4.3. Transport hazard c	lass(es)	· ·	'	
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
4.5. Environmental haz	ards	·	· · · ·	
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

14.6. Special precautions for user

Overland transport Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport Not regulated

Rail transport Not regulated

14.7. Maritime transport in bulk according to IMO instruments

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

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(b)	VatTex MultiCool -38 ; 1,2-ethanediol	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

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)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

VOC Directive (2004/42)

VOC content	: 514,63 g/l
Biocide Regulation (528/2012)	
Child-resistant fastening Tactile warning	: Not applicable : Applicable

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)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information			
Indication of changes			
Section	Changed item	Change	Comments
	Revision date	Modified	

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Indication of changes			
Section	Changed item	Change	Comments
	Supersedes	Modified	
	Type of product	Added	
9.1	Flash point	Modified	
13.1	H code	Added	

Abbreviations and acr	onyms:
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
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
ΙΑΤΑ	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
РВТ	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

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Abbreviations and acronyms:		
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

Full text of H- and EUH-statements:		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
H302	Harmful if swallowed.	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H373	May cause damage to organs through prolonged or repeated exposure.	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2	

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.