MOTOREX Oil of Switzerland
Revision: 26.09.2023

Printing date 30.01.2024

Version number 4.0

1 Identification

- · Product identifier
- · Trade name: COOL-X
- Relevant identified uses of the substance or mixture and uses advised against
- · Product category PC0 Other
- · Application of the substance / the mixture

Only for proper handling.

Coolant

- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

MOTOREX AG

Bern-Zürich-Strasse 31, Postfach

CH-4901 Langenthal

Tel. +41 (0)62 919 75 75

www.motorex.com

A1 Accessory Imports

60-62 Burchill St.

Loganholme

4129 QLD

Australia

Phone: 07 3451 1300

- · Further information obtainable from: msds@motorex.com
- · Emergency telephone number:

In case of a medical emergency following exposure to a chemical, call Poisons Information Centre Australia 13 11 26

2 Hazard(s) Identification

· Classification of the substance or mixture

Serious eye damage/irritation - Category 2A H319 Causes serious eye irritation.

Repr. 1A H360 May damage fertility or the unborn child.

- · Label elements
- GHS label elements

The product is classified and labelled according to the Globally Harmonised System (GHS).

Hazard pictograms





GHS07 GHS08

- · Signal word Danger
- · Hazard-determining components of labelling:

potassium 2-ethylhexanoate

· Hazard statements

H319 Causes serious eye irritation.

H360 May damage fertility or the unborn child.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face 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.

P308+P313 IF exposed or concerned: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention.

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P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/

international regulations.

· Other hazards

· Results of PBT and vPvB assessment

PBT: Not applicable.vPvB: Not applicable.

3 Composition and Information on Ingredients

- · Chemical characterisation: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
	Ethane-1,2-diol STOT RE 2, H373	≥1-≤3%
	potassium 2-ethylhexanoate Repr. 1A, H360; Eye Dam. 1, H318; Skin Irrit. 2, H315	1-2.5%
	2-phenoxyethanol Eye Dam. 1, H318; Acute Tox. 4, H302; STOT SE 3, H335	1%
	4(or 5)-methyl-1H-benzotriazole, potassium salt Repr. 2, H361; Skin Corr. 1B, H314; Acute Tox. 4, H302	≥0-≤0.25%

Regulation (EC) No 648/2004 on detergents / Labelling for contents preservation agents (PHENOXYETHANOL)

4 First Aid Measures

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Remove residues with soap and water.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: Do not induce vomitting. Do not take in resorption stimulating agents.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire Fighting Measures

- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Protective equipment: No special measures required.

6 Accidental Release Measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

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[·] Additional information: For the wording of the listed hazard phrases refer to section 16.

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· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to section 13.

· Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and Storage

- · Handling:
- · Precautions for safe handling Open and handle receptacle with care.
- · Information about fire and explosion protection: Keep respiratory protective device available.
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions:

The recommended storage temperature is (deg.C): 5°C - 30°C

Store containers closed and protect against rain, dust, heat and other atmospheric influences. Avoid freezing.

Keep container tightly sealed.

- · Storage class: 6.1 C
- · Specific end use(s) No further relevant information available.

8 Exposure controls and personal protection

· Additional information about design of technical facilities: No further data; see section 7.

· Ingredients with limit values that require monitoring at the workplace:			
107-21-1 Ethane-1,2-diol			
WES Short-term value: 104** mg/m³, 40** ppm Long-term value: 10* 52** mg/m³, 20** ppm Sk;*particulate;**vapour			

SK;	particulate,**vapour				
· DNELs					
107-21-1 L	Ethane-1,2-diol				
Dermal	DNEL / Workers / Systemic effects / Long-term	106 mg/kg/24h (worker)			
	DNEL/general population/Systemic effects/Long-term	53 mg/kg/24h (consumer)			
Inhalative	DNEL / Workers / Local Effects / Long-term	35 mg/m3 (worker)			
	DNEL/general population/Local effects/Long-term	7 mg/m3 (consumer)			
3164-85-0	potassium 2-ethylhexanoate				
Oral	DNEL/general population/Systemic effects/Long-term	1 mg/kg/24h (consumer)			
Dermal	DNEL / Workers / Systemic effects / Long-term	2 mg/kg/24h (worker)			
	DNEL/general population/Systemic effects/Long-term	1 mg/kg/24h (consumer)			
Inhalative	DNEL / Workers / Systemic effects / Long-term	14 mg/m3 (worker)			
	DNEL/general population/Systemic effects/Long-term	3 mg/m3 (consumer)			
122-99-6 2	122-99-6 2-phenoxyethanol				
Oral	DNEL/general population/Systemic effects/Long-term	9.23 mg/kg/24h (consumer)			
	DNEL/general pop/Systemic effects/acute-short term	9.23 mg/kg/24h (consumer)			
Dermal	DNEL / Workers / Systemic effects / Long-term	20.83 mg/kg/24h (worker)			
	DNEL/general population/Systemic effects/Long-term	10.42 mg/kg/24h (consumer)			

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Inhalative	Inhalative DNEL / Workers / Systemic effects / Long-tea		8.07 mg/m3 (worker)	
	DNEL / Workers / Local Effects / Long-term		8.07 mg/m3 (worker)	
	DNEL/general population/Systemic effects/Lo		2.41 mg/m3 (consumer)	
	DNEL/general population/Local effects/Long-	-term	2.41 mg/m3 (consumer)	
·PNECs				
107-21-1	Ethane-1,2-diol			
PNEC / Ad	quatic organisms / Freshwater	10 mg/l (aquatic organisms)		
PNEC / Ad	quatic organisms / Marine water	1 mg/l (a	nquatic organisms)	
PNEC/Aqu	uatic org/intermittent releases(freshwater)	10 mg/l ((aquatic organisms)	
PNEC/Aqu	uatic organisms/Sewage treatment plant/STP	199.5 m	g/l (aquatic organisms)	
PNEC / Ad	quatic organisms / Sediment (freshwater)	37 mg/kg	g (aquatic organisms)	
PNEC / Ad	PNEC / Aquatic organisms / Sediment (marine water)		3.7 mg/kg (aquatic organisms)	
PNEC / Terrestrial organism / Soil		1.53 mg/kg (terrestrial organisms)		
3164-85-0	potassium 2-ethylhexanoate			
PNEC / Ad	quatic organisms / Freshwater	0.36 mg/l (aquatic organisms)		
PNEC / Ad	PNEC / Aquatic organisms / Marine water		0.036 mg/l (aquatic organisms)	
PNEC/Aqu	PNEC/Aquatic organisms/Sewage treatment plant/STP		71.7 mg/l (aquatic organisms)	
		/kg (aquatic organisms)		
PNEC / Aquatic organisms / Sediment (marine water)		0.637 mg/kg (aquatic organisms)		
PNEC / Te	errestrial organism / Soil	1.06 mg/kg (terrestrial organisms)		
122-99-6	2-phenoxyethanol			
PNEC / Ad	quatic organisms / Freshwater	0.943 mg/l (aquatic organisms)		
PNEC / Ad	PNEC / Aquatic organisms / Marine water		0.0943 mg/l (aquatic organisms)	
PNEC/Aquatic org/intermittent releases(freshwater)		3.44 mg/l (aquatic organisms)		
PNEC/Aquatic organisms/Sewage treatment plant/STP		24.8 mg/l (aquatic organisms)		
PNEC / Ad	PNEC / Aquatic organisms / Sediment (freshwater)		7.237 mg/kg (aquatic organisms)	
PNEC / Ad	PNEC / Aquatic organisms / Sediment (marine water)		0.7237 mg/kg (aquatic organisms)	
PNEC / Te	PNEC / Terrestrial organism / Soil		1.26 mg/kg (terrestrial organisms)	
Additional information: The lists valid during the making were used as basis.				

- · Additional information: The lists valid during the making were used as basis.
- · Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

Respiratory protection:

Not necessary if room is well-ventilated.

Respiratory protection if formation of aerosol or mist: use mask with filter type A2, A2/P2 or ABEK.

Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Protective gloves to EN374, resistant to oil in use. Standard EN 374 Level 3 control G1

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Fluorocarbon rubber (Viton)

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Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.4 mm

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the mixture of chemicals mentioned below the penetration time has to be at least 60 minutes (Permeation according to EN 374 Part 3: Level 1).

- · Eye protection: Goggles recommended during refilling
- · Body protection: Protective work clothing

9 Physical and Chemical Properties

· General Information

· Appearance:

· Form: Fluid

Colour: Green fluorescent
Odour: Characteristic
Odour threshold: Not determined.
pH-value at 20 °C: 8.6 (DIN 51369)

· Change in condition

· Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: 100 °C (DIN EN ISO 3405)

Flash point: >100 °C
 Flammability (solid, gas): Not applicable.
 Decomposition temperature: Not determined.

• Explosive properties: Product does not present an explosion hazard.

· Explosion limits:

Lower: Not determined.Upper: Not determined.

• Vapour pressure at 20 °C: 23 hPa

• **Density at 20 °C:** 1.01 g/cm³ (ASTM D 4052)

Relative density
 Vapour density
 Evaporation rate
 Not determined.
 Not determined.

· Solubility in / Miscibility with

water: Fully miscible.Partition coefficient: n-octanol/water: Not determined.

· Viscosity:

Dynamic: Not determined.Kinematic: Not determined.

· Solvent separation test:

· **VOC (EC)** 0.00 %

· Other information No further relevant information available.

10 Stability and Reactivity

- · Reactivity No further relevant information available.
- Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.

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· Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological Information

- Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC50 \	LD/LC50 values relevant for classification:			
107-21-1 L	107-21-1 Ethane-1,2-diol			
Oral	LD50	7,712 mg/kg (rat)		
	NOEL	150 mg/kg/24h (rat)		
	NOAEL	200 mg/kg/24h (rat)		
	NOAEL	12,500 ppm (mouse)		
Dermal	LD50	3,500 mg/kg (mouse)		
	NOAEL	2,200-4,400 mg/kg/24h (dog)		
Inhalative	LC50 / 6h	2.5 mg/l (rat)		
3164-85-0	3164-85-0 potassium 2-ethylhexanoate			
Oral	LD50	1,600-3,200 mg/kg (rat)		
	NOEL	65 mg/kg/24h (rat)		
	NOAEL	180-205 mg/kg/24h (mouse)		
		61-300 mg/kg/24h (rat)		
	LOAEL	303-360 mg/kg/24h (rat)		
Dermal	LD50	2,000 mg/kg (rat)		
Inhalative	LC0 / 8h	110 mg/m3 (rat)		
122-99-6 2	2-phenoxy	ethanol		
Oral	LD50	1,840-4,070 mg/kg (rat)		
	NOAEL	369 mg/kg/24h (rat)		
Dermal	LD50	14,391 mg/kg (rat)		
		2,214 mg/kg (rabbit)		
	NOAEL	500 mg/kg/24h (rabbit)		
	LOAEL	500 mg/kg/24h (rabbit)		
Inhalative	NOAEC	48.2 mg/m3 (rat)		
	LOAEC	246 mg/m3 (rat)		

- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Causes serious eye irritation.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity May damage fertility or the unborn child.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

12 Ecological Information

· Toxicity

· Aquati	ic toxicity:
107-21	-1 Ethane-1,2-diol
LC50	7,286 mg/l/96h (fish)

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LC50	1,500 mg/l/28d (fish)	(coma: o. pago o)
EC50	3,536-13,000 mg/l/96h (algae / cyanobacteria)	
EC50	33,911 mg/l/21d (aquatic invertebrates)	
EC100	100 mg/l/48h (aquatic invertebrates)	
EC0	100 mg/l/48h (aquatic invertebrates)	
EC50	100 mg/l/48h (aquatic invertebrates)	
NOEC	7,500-15,000 mg/l/21d (aquatic invertebrates)	
NOEC	100 mg/l/72h (algae / cyanobacteria)	
NOEC	8,590-24,000 mg/l/7d (aquatic invertebrates)	
	15,380-32,000 mg/l/7d (fish)	
3164-8	5-0 potassium 2-ethylhexanoate	
LC50	70-150 mg/l/96h (fish)	
LC50	120 mg/l/48h (aquatic invertebrates)	
	270-1,801 mg/l/48h (fish)	
EC50	85.4 mg/l/24h (aquatic invertebrates)	
EC10	32 mg/l/72h (algae / cyanobacteria)	
EC50	49.3 mg/l/72h (algae / cyanobacteria)	
EC50	75 mg/l/21d (aquatic invertebrates)	
EC100	125 mg/l/48h (aquatic invertebrates)	
EC0	62.5 mg/l/48h (aquatic invertebrates)	
EC50	85.4-910 mg/l/48h (aquatic invertebrates)	
NOEC	25 mg/l/21d (aquatic invertebrates)	
LOEC	63 mg/kg/28d (aquatic invertebrates)	
122-99	-6 2-phenoxyethanol	
LC50	220-460 mg/l/96h (fish)	
LC0	220 mg/l/96h (fish)	
LC100	460 mg/l/96h (fish)	
EC10	159-333 mg/l/72h (algae / cyanobacteria)	
EC50	443-625 mg/l/72h (algae / cyanobacteria)	
EC0	500 mg/l/48h (aquatic invertebrates)	
EC50	500 mg/l/48h (aquatic invertebrates)	
NOEC	9.43-49.2 mg/l/21d (aquatic invertebrates)	
	70-500 mg/l/72h (algae / cyanobacteria)	
	100 mg/l/96h (fish)	
	22.5-110 mg/kg/28d (aquatic invertebrates)	
	tence and degradability No further relevant information available. iour in environmental systems:	
· Bioaco	cumulative potential	
107-21	-1 Ethane-1,2-diol	
Partitio	n coefficient ≤1.36 [] (log Kow) (Bioaccumulation)	

· Bioaccumulative potential			
107-21-1 Ethane-1,2-diol			
Partition coefficient	≤1.36 [] (log Kow) (Bioaccumulation)		
Biodegradability	>90 % (28d) (Biodegradability) (OECD 301 A)		
3164-85-0 potassium 2-ethylhexanoate			
Partition coefficient	≤0.851 [] (log Kow) (Bioaccumulation)		
Biodegradability	99 % (28d) (Biodegradability) (OECD 301 E)		
122-99-6 2-phenoxyethanol			
Partition coefficient	1.107-1.2 [] (log Kow) (Bioaccumulation)		

· Mobility in soil No further relevant information available.

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· Additional ecological information:

· General notes:

Water hazard class 1 (according to Appendix 1 AwSV): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact waste processors for recycling information.

Return product and/or partially emptied container in original packaging to the point of sale or hand it over to a collection point for special waste.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

UN-Number	
ADG, ADN, IMDG, IATA	Not classified as hazardous for transport
UN proper shipping name	
ADG, ADN, IMDG, IATA	Not classified as hazardous for transport
Transport hazard class(es)	
ADG, ADN, IMDG, IATA	
Class	Not classified as hazardous for transport
Packing group	
ADG, IMDG, IATA	Not classified as hazardous for transport
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Ann	ex II of
Marpol and the IBC Code	Not applicable.
UN "Model Regulation":	Not classified as hazardous for transport

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

· Australian Inventory of Industrial Chemicals			
7732-18-5	water, distilled, conductivity or of similar purity		
107-21-1	Ethane-1,2-diol		

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3164-85-0	potassium 2-ethylhexanoate		
122-99-6	2-phenoxyethanol		
148324-78-1	148324-78-1 Diethyl 2,4-dihydroxycyclodisiloxane-2 ,4-diyl-bis(trimethylene)diphosphona tetrasodium salt; reaction products with disodium metasilicate		
29385-43-1	methyl-1H-benzotriazole		
Standard for the Uniform Scheduling of Medicines and Poisons			
107-21-1 Ethane-1,2-diol S5, S6		S5, S6, S10	
122-99-6 2-p	122-99-6 2-phenoxyethanol S6		
· Australia: Priority Existing Chemicals			
None of the ingredients is listed.			

- Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Chemical safety assessment: A Chemical Safety Assessment has been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. The classification of the mixture was carried out by calculation in accordance with the rules laid down in Annex I of Regulation (EC) No 1272/2008.

No special training instructions to ensure protection of human health and environment are required.

- · purity requirement
- · Relevant phrases

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H360 May damage fertility or the unborn child.

H361 Suspected of damaging fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

- · Department issuing SDS: Abteilung Produktsicherheit
- · Contact:
- · Abbreviations and acronyms:

Acute Tox. 4: Acute toxicity - Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

Serious eye damage/irritation - Category 2A: Serious eye damage/eye irritation - Category 2A

Repr. 1A: Reproductive toxicity – Category 1A Repr. 2: Reproductive toxicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) - Category 2

* Data compared to the previous version altered.