MOTOREX Oil of Switzerland
Revision: 06.02,2023

Printing date 02.02.2024

Version number 1.2

1 Identification

- · Product identifier
- · Trade name: VALVE GUARD
- Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

· Application of the substance / the mixture

Fuel additive

Only for proper handling.

- · 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

Flam. Liq. 4 H227 Combustible liquid.

Eye Dam. 1 H318 Causes serious eye damage.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

- · Label elements
- · GHS label elements

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

· Hazard pictograms





GHS05 GHS08

· Signal word Danger

· Hazard-determining components of labelling:

Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30%)

Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Distillates (petroleum), hydrotreated light

· Hazard statements

H227 Combustible liquid.

H318 Causes serious eye damage.

H304 May be fatal if swallowed and enters airways.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

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P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from flames and hot surfaces. No smoking.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

Do NOT induce vomiting. P331

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P405 Store locked up.

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

international regulations.

· Additional information:

AUH066 Repeated exposure may cause skin dryness or cracking.

- · 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:		
EC number: 920-360-0	Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30%) Asp. Tox. 1, H304	≥10-≤50%
EC number: 925-653-7	Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) Asp. Tox. 1, H304	≥25-≤50%
CAS: 7491-09-0 EINECS: 231-308-5	Potassium 1,2-bis(2-ethylhexyloxycarbonyl) ethanesulphonate Eye Dam. 1, H318; Skin Irrit. 2, H315	≥3-<10%
CAS: 64742-47-8 EINECS: 265-149-8 Index number: 649-422-00-2	Distillates (petroleum), hydrotreated light Asp. Tox. 1, H304; Flam. Liq. 4, H227	2.5-7.5%

· Additional information:

Note L: The classification as carcinogen does not apply because the mixture (or substance) contains less than 3% dimethyl sulfoxide extract (DMSO), measured according to IP 346. For the wording of the listed hazard phrases refer to section 16.

4 First Aid Measures

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- 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.

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5 Fire Fighting Measures

- · Suitable extinguishing agents:
- CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · 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

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

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

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

· Reference to other sections

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 No special precautions are necessary if used correctly.
- Information about fire and explosion protection:

Keep ignition sources away - Do not smoke.

Do not spray onto a naked flame or any incandescent material.

- 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): ≤50°C

Keep container tightly sealed.

- · Storage class: 10
- · 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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

DNELs			
7491-09	7491-09-0 Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate		
Oral	DNEL/general population/Systemic effects/Long-term	3.75 mg/kg/24h (consumer)	
Dermal	DNEL / Workers / Systemic effects / Long-term	7.5 mg/kg/24h (worker)	
	DNEL/general population/Systemic effects/Long-term	3.75 mg/kg/24h (consumer)	

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·PNECs	
7491-09-0 Potassium 1,2-bis(2-ethylhexyloxycarbon	yl)ethanesulphonate
PNEC / Aquatic organisms / Freshwater	0.0066 mg/l (aquatic organisms)
PNEC / Aquatic organisms / Marine water	0.00066 mg/l (aquatic organisms)
PNEC/Aquatic organisms/Sewage treatment plant/STP	122 mg/l (aquatic organisms)
PNEC / Aquatic organisms / Sediment (freshwater)	0.525 mg/kg (aquatic organisms)
PNEC / Aquatic organisms / Sediment (marine water)	0.0525 mg/kg (aquatic organisms)
PNEC / Terrestrial organism / Soil	0.101 mg/kg (terrestrial organisms)

- · 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.

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

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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.

Eye protection:



safety goggles

· Body protection: Protective work clothing

9 Physical and Chemical Properties

- · General Information
- · Appearance:

· Form: Fluid · Colour: Yellow

Odour: Characteristic
 Odour threshold: Not determined.
 pH-value: Not determined.

· Change in condition

· Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: >160 °C (DIN EN ISO 3405)

· Flash point: $>61~^{\circ}C$

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Not applicable. · Flammability (solid, gas): Not determined. · Decomposition temperature: Not determined. Explosive properties:

Explosion limits:

Lower. Not determined. · Upper: Not determined. · Vapour pressure: Not determined. · Density: Not determined. Relative density Not determined. Vapour density Not determined. Evaporation rate Not determined.

Solubility in / Miscibility with

Not miscible or difficult to mix. · water:

· Partition coefficient: n-octanol/water: Not determined.

· Viscosity:

Dynamic: Not determined. Kinematic: <20.5 mm²/s @ 40 °C

· 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.
- · 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 values relevant for classification:			
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30%)			
Oral	LD50	>4,150 mg/kg (rat) (OECD 423)	
Dermal	LD50	>1,700 mg/kg (rabbit) (OECD 402)	
Inhalative	LC50 / 4h	>5.28 mg/l (rat) (OECD 403)	
7491-09-0	7491-09-0 Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate		
Oral	LD50	2,100-3,000 mg/kg (rat)	
	NOAEL	750 mg/kg/24h (rat)	
Dermal	LD50	10,000 mg/kg (rabbit)	
64742-47-	64742-47-8 Distillates (petroleum), hydrotreated light		
Oral	LD50	5,000 mg/kg (rat)	
	NOAEL	1,000-5,000 mg/kg/24h (rat)	
Dermal	LD50	2,000 mg/kg (rabbit)	
Inhalative	LC50 / 4h	5.28 mg/l (rat)	
	NOAEL	200 ppm (rat)	
	NOAEC	275-10,400 mg/m3 (rat)	
Skin corresion/irritation Record on available data, the electrication criteria are not met			

Skin corrosion/irritation Based on available data, the classification criteria are not met.

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- · Serious eye damage/irritation Causes serious eye damage.
- 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 Based on available data, the classification criteria are not met.
- · 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 May be fatal if swallowed and enters airways.

12 Ecological Information

· Toxicity

· Aquatic	· Aquatic toxicity:			
Hydroca	ydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30%)			
EL50	1,000 mg/l/72h (Pseudokirchnerella subcapitata)			
EL0	1,000 mg/l/48h (Daphnia Magna)			
NOELR	NOELR 5,000 mg/l/21d (Brachydanio rerio)			
7491-09	7491-09-0 Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate			
LC50	LC50 49 mg/l/96h (fish)			
LC0	20 mg/l/96h (fish)			
LC50	49 mg/l/48h (fish)			
LC50 49 mg/l/72h (fish)				
LC50	24 mg/l/24h (fish)			
EC50	24.8-38.7 mg/l/24h (aquatic invertebrates)			
EC10	12.4-34.3 mg/l/72h (algae / cyanobacteria)			
EC50	39.3-128.5 mg/l/72h (algae / cyanobacteria)			
EC50	6.6-10.3 mg/l/48h (aquatic invertebrates)			
	64742-47-8 Distillates (petroleum), hydrotreated light			
LL50	2-5 mg/l/96h (fish)			
LL50	2-5 mg/l/48h (fish)			
LL50	5-17 mg/l/24h (fish)			
EL50	1.4 mg/l/48h (aquatic invertebrates)			
EL50	4.6 mg/l/24h (aquatic invertebrates)			
	1-3 mg/l/24h (algae / cyanobacteria)			
EL50	1-3 mg/l/72h (algae / cyanobacteria)			
EL50	0.81-0.89 mg/l/21d (aquatic invertebrates)			
NOELR	1.22 mg/l/21d (aquatic invertebrates)			
NOELR	1,000 mg/l/72h (algae / cyanobacteria)			

- · Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:

· Bioaccumulative potential		
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30%)		
Biodegradability	60.7 % (28d) (Biodegradability)	
7491-09-0 Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate		
Partition coefficient	1.998 [] (log Kow) (Bioaccumulation)	
Biodegradability	91.1 % (28d) (Biodegradability) (OECD 310)	

Mobility in soil No further relevant information available.

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- · Additional ecological information:
- General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

- · 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.

UN-Number ADG, IMDG, IATA	Not classified as hazardous for transport
UN proper shipping name ADG, 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:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex 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		
7491-09-0 Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate			
	64742-47-8	Distillates (petroleum), hydrotreated light	
	64742-94-5	Solvent naphtha (petroleum), heavy arom.	
	29190-28-1	2,4-bis(xylylazo)resorcinol	
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91-20-3 naphthalene	(Contd. of page 7)
· Standard for the Uniform Scheduling of Medicines and Poisons	
91-20-3 naphthalene	S6, S10
· 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

H227 Combustible liquid.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H318 Causes serious eye damage.

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

Flam. Liq. 4: Flammable liquids - Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

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

Asp. Tox. 1: Aspiration hazard - Category 1

· * Data compared to the previous version altered.

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