

Safety Data Sheet

JLM Valve Saver Fluid



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Version 4

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

1.1. Product Identifier

Product name JLM Valve Saver Fluid

Pure substance/mixture Mixture

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

Recommended Use Fuel additive
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

JLM Lubricants B.V
Schiphol Boulevard 127
1118 BG Schiphol
The Netherlands
Tel: +31 (0) 20 2014995

For further information, please contact

Contact Point R&D
E-mail address info@jlm lubricants.com

1.4. Emergency telephone number

Emergency telephone +31 (0) 20 2014995

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Aspiration toxicity	Category 1 - (H304)
Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 1 - (H318)

2.2. Label Elements

Product Identifier

Contains Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics, <2% aromatics, Distillates (petroleum), hydrotreated light, Potassium 1,2-bis(2-ethylhexyloxy carbonyl) ethanesulphonate



Signal Word
DANGER

Hazard statements

H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H318 - Causes serious eye damage

Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear 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
P310 - Immediately call a POISON CENTER or doctor
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P331 - Do NOT induce vomiting

2.3. Other Hazards

No information available

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	EC No	CAS No	REACH registration number	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Weight-%
Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics, <2% aromatics	926-141-6	64742-47-8	01-2119456620-43	Asp. Tox. 1 (H304) (EUH066)	10-25
2-Ethyl-1-Hexanol	203-234-3	104-76-7	01-2119487289-20	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H332) STOT SE 3 (H335)	5-10
Potassium 1,2-bis(2-ethylhexyloxycarbonyl) ethanesuphonate	231-308-5***	7491-09-0	01-2119919740-39** *	Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	1-5
Distillates (petroleum), hydrotreated light	265-149-8***	64742-47-8	01-2119456620-43** *	Asp. Tox. 1 (H304)	1-5

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice

When in doubt or if symptoms are observed, get medical advice.

Inhalation	Remove to fresh air. If symptoms persist, call a doctor.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a doctor. Wash contaminated clothing before reuse. Rub greasy ointment into the skin.
Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Call a doctor immediately.
Ingestion	Do NOT induce vomiting. Rinse mouth. Drink plenty of water. Never give anything by mouth to an unconscious person. Call a doctor.
Self-protection of the first aider	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

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

Symptoms Irritating to skin. Causes serious eye irritation. Respiratory complaints. Causes serious eye damage. Repeated exposure may cause skin dryness or cracking.

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

Note to doctors Observe risk of aspiration if vomiting occurs.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

Use. Carbon dioxide (CO₂). Extinguishing powder. Alcohol resistant foam. Cool containers with flooding quantities of water until well after fire is out.

Unsuitable Extinguishing Media

Do not use a solid water stream as it may scatter and spread fire

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapours

Hazardous combustion products Carbon dioxide (CO₂), Carbon monoxide, Nitrogen oxides (NO_x).

5.3. Advice for firefighters

In the event of fire and/or explosion do not breathe fumes. Use water spray jet to protect personnel and to cool endangered containers. Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required. Do not allow run-off from fire-fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Special danger of slipping by leaking/spilling product. Ensure adequate ventilation, especially in confined areas. Do not breathe gas/fumes/vapour/spray. Evacuate personnel to safe areas.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

See Section 12 for additional Ecological Information. Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Use personal protective equipment as required. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

6.4. Reference to other sections

See section 8 for national exposure control parameters. See Section 12 for additional Ecological Information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Ensure adequate ventilation, especially in confined areas. Do not breathe gas/fumes/vapour/spray. Use personal protective equipment as required. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities. Avoid contact with skin, eyes or clothing.

General hygiene considerations

Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Never use pressure to empty; drum is not a pressure vessel.

7.3. Specific end use(s)

Risk Management Methods (RMM)

The information required is contained in this Material Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	United Kingdom	France	Spain	Germany
Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics, <2% aromatics 64742-47-8	-	-	-	-	TWA: 5 mg/m ³ TWA: 50 ppm TWA: 350 mg/m ³ Ceiling / Peak: 20 mg/m ³ Ceiling / Peak: 100 ppm Ceiling / Peak: 700 mg/m ³ Skin***
2-Ethyl-1-Hexanol 104-76-7	-	STEL: 3 ppm STEL: 16.2 mg/m ³ TWA: 1 ppm TWA: 5.4 mg/m ³ ***	-	TWA: 1 ppm TWA: 1.54 mg/m ³ ***	TWA: 10 ppm TWA: 54 mg/m ³ Ceiling / Peak: 10 ppm Ceiling / Peak: 54 mg/m ³ ***

Distillates (petroleum), hydrotreated light 64742-47-8	-	-	-	-	TWA: 5 mg/m ³ TWA: 50 ppm TWA: 350 mg/m ³ Ceiling / Peak: 20 mg/m ³ Ceiling / Peak: 100 ppm Ceiling / Peak: 700 mg/m ³ Skin***
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
2-Ethyl-1-Hexanol 104-76-7	-	-	TWA: 5.4 mg/m ³ ***	TWA: 1 ppm TWA: 5.4 mg/m ³ ***	TWA: 1 ppm TWA: 5.4 mg/m ³ ***
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics, <2% aromatics 64742-47-8	-	STEL: 100 ppm STEL: 700 mg/m ³ TWA: 50 ppm TWA: 350 mg/m ³ TWA: 5 mg/m ³ ***	-	-	-
2-Ethyl-1-Hexanol 104-76-7	STEL 2 ppm STEL 10.8 mg/m ³ TWA: 1 ppm TWA: 5.4 mg/m ³ ***	STEL: 20 ppm STEL: 110 mg/m ³ TWA: 20 ppm TWA: 110 mg/m ³ ***	STEL: 10.8 mg/m ³ TWA: 5.4 mg/m ³ ***	TWA: 1 ppm TWA: 5.4 mg/m ³ STEL: 2 ppm STEL: 10.8 mg/m ³ ***	TWA: 1 ppm TWA: 5.4 mg/m ³ STEL: 3 ppm STEL: 16.2 mg/m ³ ***
Distillates (petroleum), hydrotreated light 64742-47-8	-	STEL: 100 ppm STEL: 700 mg/m ³ TWA: 50 ppm TWA: 350 mg/m ³ TWA: 5 mg/m ³ ***	-	-	-
Chemical name	Sweden	Belgium	Greece	Turkey	Czech Republic
2-Ethyl-1-Hexanol 104-76-7	1 ppm TLV NGV; 5.4 mg/m ³ TLV NGV***	1 ppm TWA; 5.4 mg/m ³ TWA***	1 ppm TWA; 5.4 mg/m ³ TWA***	-	-

Derived No Effect Level (DNEL) worker

Chemical name	oral	dermal	Inhalation
2-Ethyl-1-Hexanol 104-76-7		23 mg/kg bw/day - systemic effects, long term	53.2 mg/m ³ - local effects, acute 12.8 mg/m ³ - systemic effects, long term 53.2 mg/m ³ - local effects, long term

Derived No Effect Level (DNEL) Consumer

Chemical name	oral	dermal	Inhalation
2-Ethyl-1-Hexanol 104-76-7	1.1 mg/kg bw/day - systemic effects, long term	11.4 mg/kg bw/day - systemic effects, long term	26.6 mg/m ³ - local effects, acute 2.3 mg/m ³ - systemic effects, long term 26.6 mg/m ³ - local effects, long term

Predicted No Effect Concentration (PNEC)

Chemical name	Fresh Water	Freshwater sediment	Sea Water
2-Ethyl-1-Hexanol 104-76-7	0.017 mg/l	0.284 mg/kg dwt	0.002 mg/l
Chemical name	Sea sediment	Soil	Impact on Sewage Treatment
2-Ethyl-1-Hexanol 104-76-7	0.028 mg/kg dwt	0.047 mg/kg dwt	10 mg/l

8.2. Exposure controls**Engineering controls**

Eyewash stations. Provide adequate ventilation as well as local exhaust at critical locations.

**Personal Protective Equipment
Eye/face Protection**

Tight sealing safety goggles.

Hand protection	Wear protective gloves. To protect the wearer, gloves must be the correct fit and be used properly. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves.
Skin and Body Protection	Suitable protective clothing. Wear protective gloves. To protect the wearer, gloves must be the correct fit and be used properly. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Gloves must conform to standard EN 374.
Respiratory protection	Respiratory protection necessary at: insufficient ventilation. exposure limit overshoot. insufficient exhaust. Handling larger quantities. Use. ∴ Positive Pressure Self-Contained Breathing Apparatus (SCBA). /. Filtering device (full mask or mouthpiece) with filter.
Recommended Filter type:	ABEK1/ ABEK2.

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State	Liquid	Odour	characteristic
Appearance	No information available	Odour threshold	No information available
Colour	light yellow		
Property	Values	Remarks • Method	
pH		No information available	
Melting point/freezing point		No information available	
Boiling point / boiling range	> 150 °C / 302 °F		
Flash Point	> 95 °C / > 203 °F		
Evaporation Rate		No information available	
Flammability (solid, gas)		No information available	
Flammability Limit in Air			
Upper flammability limit:	No data available		
Lower flammability limit	No data available		
Vapour pressure	No data available	@ 20° C	
	< 1000 hPa	@ 50°C	
Vapour Density		No information available	
Specific gravity	approx. 0.880 g/cm ³	@ 20°C	
Water solubility	No data available	@ 20° C	
Solubility(ies)	Insoluble in water		
Partition coefficient		No information available	
Autoignition Temperature		No information available	
Decomposition temperature		No information available	
Kinematic viscosity	< 20 mm ² /s	@ 40°C	
	approx. 27 mm ² /s	@ 25°C	
Dynamic viscosity	No data available	@ 40 °C	
Explosive properties	No information available		
Oxidising properties	No information available		

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

None known based on information supplied.

10.5. Incompatible materials

Incompatible with oxidising agents. Acids. Bases.

10.6. Hazardous decomposition products

Thermal decomposition can lead to release of irritating and toxic gases and vapours. Carbon dioxide (CO₂). Carbon monoxide. Nitrogen oxides (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects**Acute Toxicity****Product Information**

Product does not present an acute toxicity hazard based on known or supplied information.

Inhalation	No data available.
Eye Contact	No data available.
Skin contact	No data available.
Ingestion	No data available.

The following values are calculated based on chapter 3.1 of the GHS document

Unknown acute toxicity	0% of the mixture consists of ingredient(s) of unknown toxicity.
ATEmix (inhalation-dust/mist)	18.70 mg/l

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics, <2% aromatics	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5000 mg/m ³ (Rat 8h)
2-Ethyl-1-Hexanol	approx. 2047 mg/kg (Rat)	> 2600 mg/kg (Rabbit)	>= 1400 mg/m ³ (Rat 4h)
Distillates (petroleum), hydrotreated light	> 5000 mg/kg (Rat)***	> 2000 mg/kg (Rabbit)***	> 5.2 mg/L (Rat) 4 h***

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Sensitisation No information available.

Germ Cell Mutagenicity No information available.

Carcinogenicity No information available.

Reproductive Toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target organ effects central nervous system, Eyes, Respiratory System, Skin.

Aspiration Hazard No information available.

SECTION 12: Ecological information

12.1. Toxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Product Information

Acute (short-term) algae toxicity

EC50 No information available
 EC0 No information available
 IC50 No information available
 IC0 No information available
 ErC50 No information available
 EbC50 No information available

Acute (short-term) fish toxicity

LC50 No information available
 LC0 No information available
 EC50 No information available
 EC0 No information available

Acute (short-term) aquatic invertebrate toxicity

EC50 No information available
 EC0 No information available

Chronic (long-term) algae toxicity

NOEC No information available
 LOEC No information available

Chronic (long-term) fish toxicity

NOEC No information available
 LOEC No information available

Chronic (long-term) aquatic invertebrate toxicity

NOEC No information available
 LOEC No information available

Chemical name	Algae/aquatic plants	Fish	Crustacea
Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics, <2% aromatics	EL0: approx. 1000 mg/l (Pseudokirchneriella subcapitata 72h)	LL0: approx. 1000 mg/l (Oncorhynchus mykiss 96h)	EL0: approx. 1000 mg/l (Daphnia magna 48h)
2-Ethyl-1-Hexanol	EC50: approx. 11.5 mg/l (Desmodesmus subspicatus 72h)	LC50: approx. 17.1 mg/l (Leuciscus idus 96h); LC50: approx. 28.2 mg/l (Pimephales promelas 96h)	EC50: approx. 39 mg/l (Daphnia pulex 48h)
Potassium 1,2-bis(2-ethylhexyloxycarbonyl) ethanesulphonate	-	LC50: approx. 27.2 mg/l (96h)	-
Distillates (petroleum), hydrotreated light	-	2.2: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 2.4: 96 h	4720: 96 h <i>Den-dronereides heteropoda</i> mg/L LC50***

		Oncorhynchus mykiss mg/L LC50 static 45: 96 h Pimephales promelas mg/L LC50 flow-through***	
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12.2. Persistence and degradability**Product Information**

Biodegradation	No information available
BOD	No information available
ThCO2	No information available
DOC	No information available

Chemical name	Biodegradation
Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics, <2% aromatics 64742-47-8	Biodegradation: approx. 69 % (672h)

12.3. Bioaccumulative potential**Product Information**

Bioaccumulation (factor)	No information available
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Chemical name	Partition coefficient
2-Ethyl-1-Hexanol	2.9

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT). This preparation contains no substance considered to be persistent, bio-accumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB). This preparation contains no substance considered to be very persistent nor very bio-accumulating (vPvB).

12.6. Other adverse effects

No information available

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Waste from residues/unused products	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Contaminated packages must be completely emptied and can be re-used following proper cleaning. Clean IBCs or drums at approved facility. Packing which cannot be properly cleaned must be disposed of. Handle contaminated packages in the same way as the substance itself.
OTHER INFORMATION	Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

ADR

14.1. UN number	Not regulated
14.2. UN proper shipping name	Not regulated
14.3. Transport hazard class(es)	Not regulated
Labels	-
14.4. Packing group	Not regulated
Description	-
14.5. Environmental hazards	Not applicable
14.6. Special precautions for user	None
Classification code	-
Tunnel restriction code	-
Limited quantity (LQ)	-
ADR Hazard Id (Kemmler Number)	-
Note:	-

RID

14.1. UN number	Not regulated
14.2. UN proper shipping name	Not regulated
14.3. Transport hazard class(es)	Not regulated
Labels	-
14.4. Packing group	Not regulated
Description	-
14.5. Environmental hazards	Not applicable
14.6. Special precautions for user	None
Classification code	-
Limited quantity (LQ)	-
Note:	-

IMDG

14.1. UN number	Not regulated
14.2. UN proper shipping name	Not regulated
14.3. Transport hazard class(es)	Not regulated
Subsidiary hazard class	-
14.4. Packing group	Not regulated
Description	-
14.5. Environmental hazards	Not applicable
14.6. Special precautions for user	None
EmS-No	-
Limited quantity (LQ)	-
Note:	-
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	No information available

IATA

14.1. UN number	Not regulated
14.2. UN proper shipping name	Not regulated
14.3. Transport hazard class(es)	Not regulated
Subsidiary hazard class	-
14.4. Packing group	Not regulated
Description	-
14.5. Environmental hazards	Not applicable
14.6. Special precautions for user	None
ERG Code	-
Limited quantity (LQ)	-
Note:	-

SECTION 15: Regulatory information

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

National Regulations

See section 8 for national exposure control parameters

France**Occupational Illnesses (R-463-3, France) *****

Chemical name	French RG number
Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics, <2% aromatics 64742-47-8	RG 84***
Distillates (petroleum), hydrotreated light 64742-47-8	RG 84***

Germany

Water hazard class (WGK) Hazardous to water (WGK 2)

Storage class 10

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

International Inventories

All of the components in the product are on the following Inventory lists: TSCA (United States), Europe (EINECS/ELINCS/NLP).

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out. Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H335 - May cause respiratory irritation

H304 - May be fatal if swallowed and enters airways

H318 - Causes serious eye damage

EUH066 - Repeated exposure may cause skin dryness or cracking

Revision note

See the red text with asterisks in this safety data sheet for the latest changes.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

End of Safety Data Sheet