

Safety Data Sheet



#J01230, #J01250, #J01270, JLM Valve Saver Fluid

Issue date 16-Jun-2016

Revision date 16-Jun-2016

Version 2

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

1.1. Product Identifier

Product name #J01230, #J01250, #J01270, 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 Alkmaar
The Netherlands
+31 (0)20 201 4995

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) 20 201 4995

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 2 *** - (H319) *** |

2.2. Label Elements

Product Identifier

Contains Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics, <2% aromatics, Kerosine (petroleum), Solvent naphtha (petroleum), heavy aromatic



**Signal Word****DANGER*******Hazard statements**

H304 - May be fatal if swallowed and enters airways

H315 - Causes skin irritation

H319 - Causes serious eye irritation***

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

P280 - Wear protective gloves and eye/face protection

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P302 + P352 - IF ON SKIN: Wash with plenty of water and soap

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

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) *** | 5-10 |
| 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 | No data available | Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) *** | 1-5 |
| Kerosine (petroleum)*** | 232-366-4*** | 8008-20-6 | No data available | Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) *** | 1-5 |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics*** | 265-149-8*** | 64742-47-8 | 01-2119456620-43** * | Asp. Tox. 1 (H304) *** | 0.1-1 |

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.*** |
| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. If eye irritation persists: Get medical advice/attention.*** |
| 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.*** |
|-----------------|---|

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.***



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. Cover liquid spill with sand, earth or other non-combustible absorbent material. 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 |
|--------------------------------------|----------------|--|---|---------|----------------|
| Kerosine (petroleum)*** 8008-20-6 | - | - | - | S**** | - |
| Chemical name | Italy | Portugal | Netherlands | Finland | Denmark |
| Kerosine (petroleum)*** 8008-20-6 | - | TWA: 200 ppm*** | - | - | - |
| Chemical name | Austria | Switzerland | Poland | Norway | Ireland |
| Kerosine (petroleum)*** 8008-20-6 | - | - | STEL: 300 mg/m ³ TWA: 100 mg/m ³ *** | - | - |
| Chemical name | Sweden | Belgium | Greece | Turkey | Czech Republic |
| Kerosine (petroleum)*** 8008-20-6 | - | 200 mg/m ³ TWA (application limited to exposure conditions to negligible aerosols, total hydrocarbon vapor) Skin*** | - | - | - |



| | |
|--|---------------------------|
| Derived No Effect Level (DNEL) | No information available |
| Predicted No Effect Concentration (PNEC) | No information available. |

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 | Wear safety glasses with side shields (or 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 | | |
| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> | |
| 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 < 1000*** hPa*** | @ 20° C @ 50°C*** | |
| Vapour Density | | No information available | |
| Specific gravity | approx. 0.880 g/cm3*** | @ 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*** mm2/s*** approx.*** 27*** mm2/s*** | @ 40°C*** @ 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 productsThermal 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*** mg/l |

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|-------------------------|-----------------------------|----------------------------|---------------------------------------|
| 2-Ethyl-1-Hexanol*** | approx. 2047 mg/kg (Rat)*** | > 2600 mg/kg (Rabbit)*** | >= 1400 mg/m ³ (Rat 4h)*** |
| Kerosine (petroleum)*** | > 5000 mg/kg (Rat)*** | > 2000 mg/kg (Rabbit)*** | > 5.28 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

7.1535% 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)*** |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics*** | - | 45: 96 h Pimephales promelas mg/L LC50 flow-through 2.2: 96 h Lepomis macrochirus mg/L LC50 static 2.4: 96 h Oncorhynchus mykiss mg/L LC50 static*** | - |

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)*** |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics*** 64742-47-8 | Biodegradation: approx. 69 % (672h OECD 301F)*** |

12.3. Bioaccumulative potential**Product Information**

Bioaccumulation (factor) No information available

| Chemical name | Partition coefficient |
|--|-----------------------|
| 2-Ethyl-1-Hexanol*** | 2.9*** |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics*** | 6*** |

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.

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

| Chemical name | French RG number |
|--|------------------|
| Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics, <2% aromatics*** 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

H226 - Flammable liquid and vapour

H351 - Suspected of causing cancer if inhaled

H302 - Harmful if swallowed

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

H411 - Toxic to aquatic life with long lasting effects

EUH066 - Repeated exposure may cause skin dryness or cracking***



Revision note

Not applicable.

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

End of Safety Data Sheet