

S-OIL SEVEN RED #7 SL 5W-30

Date of the previous version: 2019-06-19

Revision Date: 2019-12-16

Version 2

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

| Product name | S-OIL SEVEN RED #7 SL 5W-30 |
|------------------------|-----------------------------|
| Pure substance/mixture | Mixture |

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

Recommended Use

Gasoline Engine Oil

1.3. Details of the supplier of the safety data sheet

Supplier S-OIL CORPORATION 192, Baekbeom-ro, Mapo-gu Seoul 04196, Korea

For further information, please contact:

 Contact Point
 HSSEQ

 E-mail Address
 dolyoo@s-oil-total.com

1.4. Emergency telephone number

Korea

+82 2 3772-5655

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

GHS Classification

Not classified as hazardous

2.2. Label elements

GHS label elements, including precautionary statements

| Symbol(s) | Not Classified |
|--------------|----------------|
| Signal Words | Not Classified |

2.3. GHS Precautionary Statements

| Prevention | Not Classified |
|------------|----------------|
| Response | Not Classified |
| Storage | Not Classified |
| Disposal | Not Classified |



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2.4. Other hazards

Physical-Chemical Properties Contaminated surfaces will be extremely slippery.

Environmental properties Should not be released into the environment

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixture

| Chemical Name | CAS-No | EC-No | Weight % |
|--|------------|-----------|-------------|
| Distillates (petroleum), hydrotreated heavy paraffinic | 64742-54-7 | 265-157-1 | 81.0 ~ 90.0 |
| Mixed performance additive | Mixture | - | 4.0 ~ 10.0 |
| Viscosity modifier additive | Mixture | - | 3.0 ~ 9.0 |
| Oil solution of acrylic polymer | Mixture | - | < 1.0 |

Additional information

Skin contact

Inhalation

Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

4. FIRST AID MEASURES

4.1. Description of first-aid measures

| General advice | IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE. | |
|--|---|--|
| Eye contact | Rinse thoroughly with plenty of water, also under the eyelids. | |
| Skin contact | Remove contaminated clothing and shoes. Wash skin with soap and water. Wash contaminated clothing before reuse. High pressure jets may cause skin damage. In this case, the casualty should be sent immediately to hospital. | |
| Inhalation | Move to fresh air. | |
| Ingestion | Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately. | |
| 4.2. Most important symptoms and effects, both acute and delayed | | |
| Eye contact | Not classified. | |
| | Not classified. High pressure injection of the products under the skin may have | |

| very serious consequences even though no symptom or injury may be apparent. |
|--|
| Not classified. Inhalation of vapors in high concentration may cause irritation of |

Ingestion Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

respiratory system.



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4.3. Indication of immediate medical attention and special treatment needed, if necessary

| Notes to physician | Treat symptomatically. |
|--|---|
| 5. FIRE-FIGHTING MEASURES | |
| 5.1. Extinguishing media | |
| Suitable extinguishing media | CO2, dry chemical, dry sand, alcohol-resistant foam. |
| Unsuitable extinguishing media | No information available |
| 5.2. Special hazards arising from | the substance or mixture |
| Special Hazard | Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These maybe highly dangerous if inhaled in confined spaces or at high concentration. |
| 5.3. Advice for fire-fighters | |
| Special protective equipment for fire- fighters | Wear self-contained breathing apparatus and protective suit. |
| Other information | Cool containers / tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

| General Information | Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery. Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. | | |
|---|---|--|--|
| 6.2. Environmental precautions | | | |
| General Information | Do not allow material to contaminate ground water system. Try to prevent the material from entering drains or water courses. Local authorities should be advised if significant spillages cannot be contained. | | |
| 6.3. Methods and material for containment and cleaning up | | | |
| Methods for containment | Dam up. Contain spillage, and then collect with non-combustible absorbent | | |

| Methods for containment | Dam up. Contain spillage, and then collect with non-combustible absorbent |
|-------------------------|--|
| | material, (e.g.sand, earth, diatomaceous earth, vermiculite) and place in |
| | container for disposal according to local / national regulations (see section 13). |
| | Keep in suitable, closed containers for disposal. |
| | |

6.4. Reference to other sections

| Personal Protective Equipment | See Section 8 for more detail. | |
|-------------------------------|--------------------------------|--|
| Waste treatment | See section 13. | |



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7. HANDLING AND STORAGE

7.1. Precautions for safe handling

| Advice on safe handling | When using, do not eat, drink or smoke. For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing. | |
|---|--|--|
| Prevention of fire and explosion | Take precautionary measures against static discharges. Ground/bond containers, tanks and transfer/receiving equipment. | |
| Hygiene measures | Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets. | |
| 7.2. Conditions for safe storage, including any incompatibilities | | |

| Technical measures/Storage conditions | Keep away from food, drink and animal feedingstuffs. Keep in a bunded area. Keep container tightly closed. Keep preferably in the original container. Otherwise reproduce all indication of the regulation label on the new container. Do not remove the hazard labels of the containers (even if they are empty). Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Protect from frost, heat and sunlight. Protect from moisture. |
|---------------------------------------|--|
| Materials to Avoid | Strong oxidizing agents. |

7.3. Specific end uses

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

| Exposure limits | oil mist : 10mg/m ₃ , for 15 minutes; oil mist : 5mg/m ₃ , for 8 hours |
|--------------------------------|--|
| Legend | See section 16. |
| 8.2. Exposure controls | |
| Occupational Exposure Controls | |
| Engineering Measures | Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment. |
| Personal Protective Equipment | |
| General Information | If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied. |
| Respiratory protection | When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Respirator with combination filter for vapour/particulate (EN 14387). The use of breathing apparatus must comply strictly with the manufacturer's |
| | Version GHS |



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| | instructions a | and the regulations governing their choices and uses. | |
| Eye Protection | If splashes a | re likely to occur, wear:. Safety glasses with side-shield | ds. |
| Skin and body protection | Wear suitable | e protective clothing. Protective shoes or boots. Long s | sleeved clothing. |
| instructions re supplier of the which the pro mixed with otl | | n-proof gloves. Fluorinated rubber. Nitrile rubber. Pleas regarding permeability and breakthrough time which are gloves. Also take into consideration the specific loca oduct is used, such as the danger of cuts, abrasion. If u ther substances, and under conditions which differ from the EC approved gloves. | e provided by the I conditions under used in solution, or |
| Environmental exposure contro | ls | | |
| | | about division allowed to entry during water as were a | |

General Information T

The product should not be allowed to enter drains, water courses or the soil.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| Color Physical State @20°C Color | | Yellow liquid Characteristic | |
|--|---|---|--|
| <u>Property</u> pH Boiling point/boiling range | <u>Values</u> | <u>Remarks</u> Not applicable Not applicable | <u>Method</u> |
| Flash point | 226 °C 428.8 °F | | Cleveland Open Cup (COC) Cleveland Open Cup (COC) |
| Evaporation rate Flammability Limits in Air Vapor Pressure Vapor density Density Water solubility Solubility in other solvents logPow Autoignition temperature Viscosity, kinematic | 855.4 kg/m³ Negligible 62.49 mm ² /s 10.45 mm ² /s | No information available No information available No information available @ 15 °C Insoluble No information available No information available No information available @ 40 °C @ 100 °C | |
| Explosive properties Oxidizing Properties Possibility of hazardous reactions | Not explosive Not applicable Not applicable | | |

9.2. Other information

10. STABILITY AND REACTIVITY

10.1. Reactivity

General Information

No information available.

10.2. Chemical stability

Stability.

Stable under recommended storage conditions.



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| 10.3. Possibility of hazard | 10.3. Possibility of hazardous reactions | | | | | |
| Hazardous Reactions | None under norma | al processing. | | | | |
| 10.4. Conditions to Avoid | | | | | | |
| Conditions to Avoid | Heat (temperature | s above flash point), sparks, ignition points, flames, | static electricity. | | | |
| 10.5. Incompatible Materi | ials_ | | | | | |
| Materials to Avoid | Strong oxidizing agents. | | | | | |
| 10.6. Hazardous Decomposition Products | | | | | | |
| Hazardous Decomposition Product | None under norma | al use. | | | | |
| 11. TOXICOLOGICAL INFORMATION | | | | | | |
| 11.1. Information on toxicological effects | | | | | | |
| Acute toxicity Local effects Product Information | | | | | | |
| Skin contact | | gh pressure injection of the products under the skin nces even though no symptom or injury may be app | , | | | |
| Eye contact | . Not classified. | | | | | |

 Ingestion
 . Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

. Not classified. Inhalation of vapors in high concentration may cause irritation of

Acute toxicity - Component Information

| Chemical name | Oral | Dermal | Inhalation |
|--|--|---|--|
| Distillates (petroleum), hydrotreated heavy paraffinic | LD50 > 5000 mg/kg bw (rat – OECD 420) | LD50 > 5000 mg/kg bw (rabbit – OECD 402) | LC50 > 5 mg/l (4h, aerosol) (rat – OECD 403) |
| Oil solution of acrylic polymer | LD50 > 2000 mg/kg (rat) | LD50 > 2000 mg/kg (rabbit) | |

Skin corrosion/irritation

Inhalation

| Chemical name | Skin corrosion/irritation | | |
|----------------------------|---|--|--|
| Mixed performance additive | Classification: Skin irritation. Remarks: Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying and cracking of the skin. | | |

Serious eye damage/eye irritation

| Chemical name | Serious eye damage/eye irritation |
|----------------------------|---|
| Mixed performance additive | Remarks: Causes serious eye irritation. |

Sensitization

Sensitization

Not classified as a sensitizer.

Specific effects



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| Carcinogenicity Mutagenicity Reproductive toxicity | This product is not classified carcinogenic. This product is not classified as mutagenic. This product does not present any known or suspected reproductive hazards. | | |
| Repeated Dose Toxicity | | | |
| Subchronic toxicity | No information ava | ailable. | |
| Target Organ Effects (STOT) | | | |
| Target Organ Effects (STOT) | No information ava | ailable. | |
| Other information | | | |
| Other adverse effects | | lesions (pimples) may develop following prolonged and repe t with contaminated clothing). | eated |

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Acute aquatic toxicity - Component Information

| Chemical name | Toxicity algae | Toxicity to daphnia and other aquatic invertebrates | Toxicity to fish |
|--------------------------|--------------------------|--|---------------------------|
| Distillates (petroleum), | EL50 > 100 mg/l | EL50 > 10000 mg/l | LL50 > 100 mg/l |
| hydrotreated heavy | (48h, Pseudokirchnerella | (48h, Daphnia magna – | (96h, Oncorhynchus mykiss |
| paraffinic | subcapitata – OECD 201) | OECD 202) | – OECD 203) |

Chronic aquatic toxicity - Component Information

| Chemical name | Toxicity algae | Toxicity to daphnia and other aquatic invertebrates | Toxicity to fish |
|--------------------------|----------------|--|---------------------------|
| Distillates (petroleum), | | NOEL 10 mg/l | LL50 > 100 mg/l |
| hydrotreated heavy | | (48h, Daphnia magna – | (96h, Oncorhynchus mykiss |
| paraffinic | | OECD 202) | – OECD 203) |

Effects on terrestrial organisms

No information available.

12.2. Persistence and degradability

General Information No information available.

12.3. Bioaccumulative potential

| Product Information | No information available. |
|-----------------------|---------------------------|
| logPow | No information available |
| Component Information | No information available. |

12.4. Mobility in soil

Soil

Air

Given its physical and chemical characteristics, the product generally shows low soil mobility.

Loss by evaporation is limited.



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| Water | Insoluble. The produ | ct spreads on the surface of the water. | | |
| 12.5. Results of PBT and | /PvB assessmen | <u>t</u> | | |
| PBT and vPvB assessment | No information availa | able. | | |
| 12.6. Other adverse effec | <u>ts</u> | | | |
| General Information | No information availa | able | | |
| 13. DISPOSAL CONSIDER | ATIONS | | | |
| 13.1. Waste treatment me | ethods | | | |
| Waste from Residues / Unused Products | Should not be released into the environment. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations. | | | |
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. | | | |
| EWC Waste Disposal No. | The following Waste Codes are only suggestions: 13 01 10. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used. | | | |
| 14. TRANSPORT INFORMATION | | | | |
| ADR/RID | Not regulated | | | |
| IMDG/IMO | Not regulated | | | |
| ICAO/IATA | Not regulated | | | |
| ADN | Not regulated | | | |

15. REGULATORY INFORMATION

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

International Inventories

TSCA KECL Legend TSCA - United States Toxic Substances Control Act Section 8(b) Inventory KECL - Korean Existing and Evaluated Chemical Substances

Further information 15.2. Chemical Safety Assessment

Chemical Safety Assessment No information available



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16. OTHER INFORMATION

Abbreviations, acronyms

| Legend Section 8 | | | |
|---------------------------------|--|----|-----------------------|
| + | Sensitizer | * | Skin designation |
| ** | Hazard Designation | C: | Carcinogen |
| M: | Mutagen | R: | Toxic to reproduction |
| Revision Date: Revision Note | 2019-12-16 *** Indicates updated section. | | |

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by theuser that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

End of the safety data sheet