

S-OIL SEVEN BLUE #5 CK-4 15W-40

Date of the previous version: 2019-06-19 Rev

Revision Date: 2020-10-06

Version 2.1

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

1.1. Product identifier

Product name	S-OIL SEVEN BLUE #5 CK-4 15W-40
Pure substance/mixture	Mixture

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

Recommended Use

Automotive 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 2 527-6052

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 Hazard Statements

Not Classified

2.4. GHS Precautionary Statements

Prevention	Not Classified
Response	Not Classified
Storage	Not Classified
Disposal	Not Classified



S-OIL SEVEN BLUE #5 CK-4 15W-40

Date of the previous version: 2019-06-19

Revision Date: 2020-10-06

Version 2.1

2.5. 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

3.1. Mixture

Chemical Name	CAS-No	EC-No	Weight %
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	265-157-1	76.0 ~ 85.0
Mixed performance additive	Mixture	-	10.0 ~ 18.0
Viscosity modifier additive	Mixture	-	3.0 ~ 10.0
Additional information	Product containing n	nineral oil with less th	an 3% DMSO extract as measured

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.		
Skin contact	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.		
Inhalation	Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system.		
Ingestion	Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.		
4.3. Indication of immediate medical attention and special treatment needed, if necessary			

Notes to physician

Treat symptomatically.

5. FIRE-FIGHTING MEASURES



S-OIL SEVEN BLUE #5 CK-4 15W-40

 Date of the previous version: 2019-06-19
 Revision Date: 2020-10-06
 Version 2.1

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 cannot be contained.
6.3. Methods and material for co	ntainment and cleaning up
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.
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.



S-OIL SEVEN BLUE #5 CK-4 15W-40

Date of the previous version: 2019-0	06-19 Revision Date: 2020-10-06	Version 2.1
Prevention of fire and explosion	Take precautionary measures against static discharges. Grou containers, tanks and transfer/receiving equipment.	und/bond
Hygiene measures	Ensure the application of strict rules of hygiene by the persor risk of contact with the product. Regular cleaning of equipmen clothing is recommended. Wash hands before breaks and im handling the product. Do not use abrasives, solvents or fuels with rags that have been contaminated with product. Do not p contaminated rags into workwear pockets.	nt, work area and mediately after . Do not dry hands
7.2. Conditions for safe stor	age, including any incompatibilities	
Technical measures/Storage conditions	Keep away from food, drink and animal feeding stuffs. Keep in Keep container tightly closed. Keep preferably in the original Otherwise reproduce all indication of the regulation label on t Do not remove the hazard labels of the containers (even if the Design the installations in order to avoid accidental emissions seal breakage, for example) onto hot casings or electrical con frost, heat and sunlight. Protect from moisture.	container. he new container. ey are empty). s of product (due to
Materials to Avoid	Strong oxidizing agents.	
7.3. Specific end uses		
8. EXPOSURE CONTROLS/PI		
8.1. Control parameters		
Exposure limits	oil mist : 10mg/m ₃ , for 15 minutes; oil mist : 5mg/m ₃ , for 8 hou	urs
Legend	See section 16.	
8.2. Exposure controls		
Occupational Exposure Controls		
Engineering Measures	Apply technical measures to comply with the occupational ex When working in confined spaces (tanks, containers, etc.), er a supply of air suitable for breathing and wear the recommen	nsure that there is
Personal Protective Equipment		
Ę	f the product is used in mixtures, it is recommended that you contact to protective equipment suppliers. These recommendations apply to supplied.	
а (When workers are facing concentrations above the exposure limit they appropriate certified respirators. Respirator with combination filter for v EN 14387). The use of breathing apparatus must comply strictly with instructions and the regulations governing their choices and uses.	/apour/particulate
Eye Protection	f splashes are likely to occur, wear:. Safety glasses with side-shields.	
Skin and body protection	Near suitable protective clothing. Protective shoes or boots. Long slee	eved clothing.
ii s	Hydrocarbon-proof gloves. Fluorinated rubber. Nitrile rubber. Please on nstructions regarding permeability and breakthrough time which are p supplier of the gloves. Also take into consideration the specific local co which the product is used, such as the danger of cuts, abrasion. If use	rovided by the onditions under



S-OIL SEVEN BLUE #5 CK-4 15W-40

Date of the previous version: 2019-06-19

Revision Date: 2020-10-06

Version 2.1

mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves.

Environmental exposure controls

General Information

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		Yellow To amber liquid	
Odor		Characteristic	
Property	Values	Remarks	Method
pH Bailing point/bailing tanga		Not applicable	
Boiling point/boiling range	236 °C	Not applicable	Clausiand Open Cup (COC)
Flash point Evaporation rate	230 C	No information available	Cleveland Open Cup (COC)
Flammability Limits in Air		No information available	
Vapor Pressure		No information available	
Vapor density		No information available	
Density	877.1 kg/m ³	@ 15 °C	
Water solubility	Negligible	Insoluble	
Solubility in other solvents		No information available	
logPow		No information available	
Autoignition temperature	Not applicable		
Viscosity, kinematic	112.4 mm²/s	@ 40 °C	
	14.52 mm²/s	@ 100 °C	
Explosive properties	Not explosive		
Oxidizing Properties	Not applicable		
Possibility of hazardous reactions	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.

10.3. Possibility of hazardous reactions

Hazardous Reactions None under

None under normal processing.

10.4. Conditions to Avoid

Conditions to Avoid

Heat (temperatures above flash point), sparks, ignition points, flames, static electricity.

10.5. Incompatible Materials

Materials to Avoid

Strong oxidizing agents.



S-OIL SEVEN BLUE #5 CK-4 15W-40

Date of the previous version: 2019-06-19

Revision Date: 2020-10-06

Version 2.1

10.6. Hazardous Decomposition Products

Hazardous Decomposition Product None under normal use.

11. TOXICOLOGICAL INFORMATION

<u>11.1. Information on toxicological effects</u>

Acute toxicity Local effects Product Information

Skin contact	. 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.
Eye contact	. Not classified.
Inhalation	. Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system.
Ingestion	. Not classified.

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)	

Sensitization

Sensitization	Not classified as a sensitizer.	
Specific effects		
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 available.	
Target Organ Effects (STOT)		
Target Organ Effects (STOT)	No information available.	
Other information		
Other adverse effects	Characteristic skin lesions (pimples) may develop following prolonged and repeated exposures (contact with contaminated clothing).	

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
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paraffinic

MATERIAL SAFETY DATA SHEET

S-OIL SEVEN BLUE #5 CK-4 15W-40

Date of the previous version: 2019-06-19 Revision Date: 2020-10-06 Version 2.1 EL50 > 100 mg/l EL50 > 10000 mg/l LL50 > 100 mg/l Distillates (petroleum), hydrotreated heavy (48h, Pseudokirchnerella (48h, Daphnia magna -(96h, Oncorhynchus mykiss subcapitata - OECD 201)

OECD 202)

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

Insoluble. The product spreads on the surface of the water.

Air Loss by evaporation is limited.

Water

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

12.6. Other adverse effects

General Information	No information available

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

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.

– OECD 203)



S-OIL SEVEN BLUE #5 CK-4 15W-40

Date of the previous version: 2019-06-19

Revision Date: 2020-10-06

Version 2.1

14. TRANSPORT INFORMATION

ADR/RID Not regulated

IMDG/IMO Not regulated

ICAO/IATA Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

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

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

16. OTHER INFORMATION

Abbreviations, acronyms

Legend Section 8			
+	Sensitizer	*	Skin designation
**	Hazard Designation	C:	Carcinogen
M:	Mutagen	R:	Toxic to reproduction

Revision Date:	2020-10-06
Revision Note	*** 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