



SAFETY DATA SHEET

Optima FS 5W-40

Product Code: M091

SECTION 1 IDENTIFICATION OF SUBSTANCE/MIXTURE AND OF COMPANY/UNDERTAKING

1.1 Product Identifier	Optima FS 5W-40
Product Code	M091
1.2 Relevant identified uses of the substance or mixture and uses advised against	Fully synthetic, multi-grade engine oil. Do not use in any other application.
1.3 Company	Exol Lubricants Limited All Saints Road Wednesbury, West Midlands, WS10 9TS
1.4 Emergency Telephone Number	+44 (0) 121 568 6800 (Monday – Friday 08.30 – 17.00 hrs GMT)
1.5 Other Information	Preparation Date: 26/09/18

SECTION 2 HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture	Not classified as hazardous in accordance with CLP (EC 1272/2008) and DPD (1999/45/EC)
2.2 Label Elements	No labelling required
2.3 Other Hazards	Not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP 346 DMSO test.

SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

3.2 Mixtures	Component	EC No.	REACH Reg. No.	GHS Classification	Conc. %
	Calcium long chain alkaryl sulphonate		Not Available	Skin Sens. H317	<0.6
	Calcium long chain alkyl phenate sulphide		Not Available	Skin Irrit. 2; H315	<1.5
	Zinc dialkyl dithiophosphate	272-028-3	Not Available	Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 2; H411	<1.5

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures	
Inhalation	If inhalation of mists, fumes or vapour causes irritation to the nose or throat, or coughing, remove to fresh air. If symptoms persist obtain medical advice.
Eyes	Wash eye thoroughly with copious quantities of water, ensuring eyelids are held open. Obtain medical advice if any pain or redness develops or persists.
Skin	Wash skin thoroughly with soap and water as soon as reasonably practicable. Remove heavily contaminated clothing and wash underlying skin.
Ingestion	If contamination of the mouth occurs, wash out thoroughly with water. Except as a deliberate act, the ingestion of large amounts of product is unlikely. If it should occur, do not induce vomiting; obtain medical advice.
4.2 Most important symptoms and effects, both acute and delayed	No ill effects known
4.3 Indication of immediate medical attention and special treatment needed, if necessary	Eye contact: immediately wash out with plenty of water

SECTION 5 FIRE-FIGHTING MEASURES

5.1 Extinguishing media	Foam, dry powder or water fog. Water can be used to cool and protect exposed material.
5.2 Specific hazards arising from the substance or mixture	Toxic fumes may be evolved on burning or exposure to heat. See Stability and Reactivity, Section 10 of this Safety Data Sheet.



SAFETY DATA SHEET

5.3 Advice for fire-fighters

Wear self-contained breathing apparatus. Water may cause splattering.

SECTION 6 ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures** Immediately evacuate all personnel from danger area. Wear Personal Protective Equipment. Eliminate all sources of heat, sparks, pilot lights, static electricity and open flames. Spilled material may make surfaces slippery.
- 6.2 Environmental precautions** Protect drains from potential spills to minimise contamination. Do not wash product into drainage system.
In the case of large spills contact the appropriate authorities. In the case of spillage on water, prevent the spread of product by the use of suitable barrier equipment. Recover product from the surface. Protect environmentally sensitive areas and water supplies.
- 6.3 Methods and material for containment and cleaning up** Absorb into dry earth or sand. Protect drains using drain covers. Dispose of as hazardous waste.
- 6.4 Reference to other sections** Personal protective equipment: See section 8

SECTION 7 HANDLING AND STORAGE

- 7.1 Precautions for safe handling** Avoid contact with eyes. If splashing is likely to occur wear a full face visor or chemical goggles as appropriate. Avoid frequent or prolonged skin contact with fresh or used product.
Good working practices, high standards of personal hygiene and plant cleanliness must be maintained at all times. Wash hands thoroughly after contact. Use disposable cloths and discard when soiled. Do not put soiled cloths into pockets.
Use a suitable barrier cream at regular intervals.
- 7.2 Conditions for safe storage, including any incompatibilities** Keep out of the reach of children.
Store under cover away from heat and sources of ignition.
- 7.3 Specific end use(s)** Intended for use as fully synthetic, fuel efficient multi-grade engine oil.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters**

Country	Substance	Long Term (8 Hours TWA)	Short Term (15 Mins)
None			
- 8.2 Exposure controls** Use local exhaust ventilation to control mists or vapours.
Hand Protection: Nitrile or neoprene protective gloves
Eye Protection: Safety glasses
Skin Protection: Protective clothing
Hygiene Measures: Wash thoroughly after handling this product

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Information on basic physical and chemical properties** Does not constitute a specification

Typical Values	Units	Optima FS 5W-40
Grades:		Optima FS 5W-40
Appearance		Amber Liquid
Odour		Mild
Odour Threshold		No data available
pH		Not applicable
Pour point/range	°C	-33
Initial boiling point and range	°C	No data available
Flash point (COC)	°C	223
Flammability		Not flammable
Upper/lower flammability or explosive limits		Not applicable
Vapour pressure	kPa (0.1 mm Hg)	No data available
Relative density	kg/m ³	0.852 @ 20°C
Solubility - water		Insoluble
Partition coefficient n-octanol/water	Log Pow	Not applicable
Autoignition temperature		No data available



SAFETY DATA SHEET

Decomposition temperature		No data available
Viscosity	mm ² /s	93.05 @ 40°C
	mm ² /s	14.73 @ 100°C
Evaporation rate		Not applicable
Vapour density		Not applicable
Explosive properties		Not applicable
Oxidising properties		None

9.2 Other Information None

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity	No dangerous reactions known
10.2 Chemical stability	Stable under normal conditions of use
10.3 Possibility of hazardous reactions	None known
10.4 Conditions to avoid	Avoid overheating.
10.5 Incompatible materials	Avoid contact with strong oxidising agents
10.6 Hazardous decomposition products	Thermal decomposition products will vary with conditions. Incomplete combustion will generate smoke, carbon dioxide and hazardous gases, including carbon monoxide.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects	
Acute Toxicity	
- Oral	No toxic components present at levels to cause classification.
- Inhalation	No toxic components present at levels to cause classification.
- Dermal	No toxic components present at levels to cause classification.
Corrosivity/Irritation	
- Eye	No components present that are classified as eye irritants.
- Skin	No components present that are classified as skin irritants but may cause skin irritation due to de-fatting effect on skin.
- Respiratory Tract	No components present that are classified as respiratory irritants.
Sensitisation	
- Skin	No evidence of sensitisation effects.
- Respiratory	No evidence of sensitisation effects.
Repeated-dose Toxicity	No data available.
Mutagenicity	No evidence of mutagenicity.
Carcinogenicity	No evidence of carcinogenicity.
Reproductive Toxicity	No evidence of reproductive toxicity.

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity	Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired
12.2 Persistence and Degradability	Not biodegradable.
12.3 Bioaccumulative Potential	There is no evidence to suggest bioaccumulation will occur.
12.4 Mobility in Soil	Spillages may penetrate the soil causing ground water contamination. Non-volatile.
12.5 Results of PBT and vPvB Assessment	No PBT or vPvB chemicals present.
12.6 Other Adverse Effects	None known.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods
Where possible, arrange for product to be recycled.
Dispose of via an authorised person/ licensed waste disposal contractor in accordance with local regulations.
Incineration may be carried out under controlled conditions provided that local regulations for emissions are met.

SECTION 14 TRANSPORT INFORMATION



SAFETY DATA SHEET

Not classified as hazardous for transport (ADR, RID, UN, IMO, and IATA/ICAO).

SECTION 15 REGULATORY INFORMATION

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

Supply regulations: DPD: Dangerous Preparations Directive; GHS: Globally Harmonised System of classification and labelling of chemicals; CLP: Classification, Labelling and Packaging regulations. Transport regulations: CDG: Carriage of Dangerous Goods regulations; ADR/RID/IMDG/ICAO/IATA regulations.
No formal chemical safety assessment has been carried out.

15.2 Chemical Safety Assessment

SECTION 16 OTHER INFORMATION

Sixth Issue September 2018
Fifth Issue March 2015: Changed name
Fourth Issue March 2013: Changed to new format.
Previous version October 2012: Changed to Reach version 2 format

Full text of classification data in sections 2 and 3

Skin Irrit. 2; H315	Skin corrosion/irritation, Hazard Category 2; Causes skin irritation
Skin Sens. 1; H317	Sensitisation, skin, Hazard Category 1; May cause an allergic skin reaction
Eye Dam. 1; H318	Serious eye damage/eye irritation, Hazard Category 1; Causes serious eye damage.
Aquatic Chronic 2; H411	Hazardous to the aquatic environment, long-term hazard, Hazard Category 2; Toxic to aquatic life with long lasting effects
Aquatic Chronic 3; H412	Hazardous to the aquatic environment, long-term hazard, Hazard Category 3; Harmful to aquatic life with long lasting effects