



# Synthetic SAE 5W-50

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 10/14/2016 Version: 1.0

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixtures  
Product name : Synthetic SAE 5W-50  
Product code : 10101, 10382, 10384

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

Recommended use : Lubricant  
Restrictions on use : No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Lucas Oil Products, Inc  
302 North Sheridan Street  
Corona, California 92880-2067 - USA  
T (951) 270-0154 - F (951) 270-1902  
[GHewgill@lucasoil.com](mailto:GHewgill@lucasoil.com) - [www.LucasOil.com](http://www.LucasOil.com)

#### 1.4. Emergency telephone number

Emergency number : (951) 493-1149 (951) 847-5949 7:00A.M. to 5:00P.M. Monday thru Friday

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Not classified

#### 2.2. Label elements

##### GHS-US labelling

No labelling applicable

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

0.72% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)  
0.72% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)  
0.72% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%)	(CAS No) 64742-54-7	60 - 90	Asp. Tox. 1, H304
Mineral oil	(CAS No) mixture	1 - 3	Asp. Tox. 1, H304
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts	(CAS No) 84605-29-8	0.5 - 1.5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411

\*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person.  
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Gently wash with plenty of soap and water. Wash contaminated clothing before reuse.  
First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water.  
First-aid measures after ingestion : Get medical advice/attention. Do NOT induce vomiting.

# Synthetic SAE 5W-50

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

- Symptoms/injuries after inhalation : In high concentrations : Inhalation of vapours may cause respiratory irritation.
- Symptoms/injuries after skin contact : Repeated dermal contact with material can lead to defatting of the skin. Repeated exposure may cause skin dryness or cracking.
- Symptoms/injuries after eye contact : May cause slight irritation.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : Carbon dioxide. Dry chemical. Foam. Water fog.
- 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

- Fire hazard : Burning produces irritating, toxic and noxious fumes.
- Reactivity : No dangerous reactions known.

### 5.3. Advice for firefighters

- Firefighting instructions : Cool adjacent structures and containers with water spray to protect and prevent ignition. Do not allow run-off from fire fighting to enter drains or water courses.
- Protection during firefighting : Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid all eye and skin contact and do not breathe vapour and mist.

#### 6.1.1. For non-emergency personnel

- Protective equipment : Refer to section 8.2.
- Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

- Protective equipment : Refer to section 8.2.
- Emergency procedures : Ventilate area. Stop leak if safe to do so.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

- For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
- Methods for cleaning up : Absorb and/or contain spill with inert material, then place in suitable container.

### 6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapour and mist. Use personal protective equipment as required. Use only outdoors or in a well-ventilated area.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep container closed when not in use.
- Incompatible products : Strong acids. Strong bases. Strong oxidizers.
- Storage area : Store in dry, cool, well-ventilated area.

# Synthetic SAE 5W-50

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%) (64742-54-7)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Mineral oil (mixture)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)		
Not applicable		

#### 8.2. Exposure controls

Appropriate engineering controls	: Avoid splashing. Ensure good ventilation of the work station. Emergency safety showers should be available in the immediate vicinity of any potential exposure. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear suitable gloves. nitrile rubber gloves.
Eye protection	: In case of splashing or aerosol production: protective goggles.
Respiratory protection	: None under normal use. In case of inadequate ventilation wear respiratory protection. NIOSH. Approved respirator.
Other information	: Do not eat, drink or smoke when using this product.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 221.1 °C
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 0.851
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: 133 cSt @ 40 °C
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

#### 9.2. Other information

No additional information available

# Synthetic SAE 5W-50

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No dangerous reactions known.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

#### 10.4. Conditions to avoid

Heat.

#### 10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers.

#### 10.6. Hazardous decomposition products

hydrocarbons. Carbon oxides (CO, CO<sub>2</sub>).

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Likely routes of exposure : Inhalation; Skin and eye contact

Acute toxicity : Not classified

#### Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%) (64742-54-7)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5.53 mg/l/4h

#### Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)

LD50 oral rat	3100 mg/kg
LD50 dermal rat	> 2002 mg/kg
LC50 inhalation rat (mg/l)	> 2.3 mg/l/4h
ATE US (oral)	3100.000 mg/kg bodyweight

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified.  
((Results obtained on a similar product). Component)

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : In high concentrations : Inhalation of vapours may cause respiratory irritation.

Symptoms/injuries after skin contact : Repeated dermal contact with material can lead to defatting of the skin. Repeated exposure may cause skin dryness or cracking.

Symptoms/injuries after eye contact : May cause slight irritation.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : No ecotoxicological data about this product are known.

#### Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%) (64742-54-7)

EC50 Daphnia 1	> 10000 mg/l
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# Synthetic SAE 5W-50

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)</b>	
LC50 fish 1	4.5 mg/l
EC50 Daphnia 1	23 mg/l
ErC50 (algae)	21 mg/l
NOEC (acute)	1.8 mg/l
NOEC chronic crustacea	0.8 mg/l

### 12.2. Persistence and degradability

<b>Synthetic SAE 5W-50</b>	
Persistence and degradability	Large quantities. May cause long-term adverse effects in the environment.

<b>Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)</b>	
Biodegradation	1.5 % 28 days

### 12.3. Bioaccumulative potential

<b>Synthetic SAE 5W-50</b>	
Bioaccumulative potential	Not established.

<b>Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)</b>	
Log Kow	0.56

### 12.4. Mobility in soil

<b>Synthetic SAE 5W-50</b>	
Ecology - soil	Not established.

### 12.5. Other adverse effects

Other information : No additional information available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Sewage disposal recommendations : Do not dispose of waste into sewer.  
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT  
Not regulated.

### Transport by sea

Not regulated.

### Air transport

Not regulated.

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

<b>Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)</b>	
SARA Section 313 - Emission Reporting	1 % N982 Zinc compounds

### 15.2. International regulations

#### CANADA

# Synthetic SAE 5W-50

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%) (64742-54-7)

Listed on the Canadian DSL (Domestic Substances List) inventory

### Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)

Listed on the Canadian DSL (Domestic Substances List) inventory

### EU-Regulations

#### Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%) (64742-54-7)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

### National regulations

#### Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%) (64742-54-7)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on Taiwan National Chemical Inventory  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on the AICS (Australian Inventory of Chemical Substances)  
Not listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
Listed on KECI (Korean Existing Chemicals Inventory)

#### Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)

Not listed on the Inventory of Existing Chemical Substances of China (IECSC)  
Listed on KECI (Korean Existing Chemicals Inventory)  
Listed on Taiwan National Chemical Inventory  
Listed on the AICS (Australian Inventory of Chemical Substances)

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

## SECTION 16: Other information

Data sources

: ACGIH (American Conference of Government Industrial Hygienists).  
European Chemicals Agency (ECHA) C&L Inventory database. Accessed at <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>.  
Kristen Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition.  
National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition.  
OSHA 29CFR 1910.1200 Hazard Communication Standard.  
TSCA Chemical Substance Inventory. Accessed at <http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html>.

Other information

: None.

Full text of H-statements:

H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H318	Causes serious eye damage
H411	Toxic to aquatic life with long lasting effects

Abbreviations and acronyms:

	ATE: Acute Toxicity Estimate
	CAS (Chemical Abstracts Service) number
	GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
	EC50: Environmental Concentration associated with a response by 50% of the test population.
	LD50: Lethal Dose for 50% of the test population
	OSHA: Occupational Safety & Health Administration
	TSCA: Toxic Substances Control Act
	STEL: Short Term Exposure Limits
	TWA: Time Weighted Average

# Synthetic SAE 5W-50

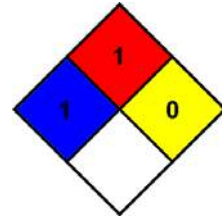
## Safety Data Sheet

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NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard : 1 - Must be preheated before ignition can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and not reactive with water.



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*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*