Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue:8/20/2015 Revision date: : Version



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

1.1. Product identifier

Product form : Mixture

Product name : Lucas Synthetic SAE 10W-60 Motor Oil

Other means of identification : Part number: |10231, 10248

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Lubricant

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Lucas Oil Products, Inc 302 North Sheridan Street 92880-2067 Corona, California - USA T (951) 270-0154 - F (951) 270-1902 GHewgill@lucasoil.com - 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: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye irritation, Category 2 H319 Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412

Full text of classification categories and H statements : see section 16

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

 $\langle ! \rangle$

GHS07

Signal word (CLP) : Warning

Hazard statements (CLP) : H319 - Causes serious eye irritation

H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (CLP) : P264 - Wash hands thoroughly after handling

P273 - Avoid release to the environment P280 - Wear eye protection, protective gloves

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing

P337+P313 - If eye irritation persists: Get medical advice/attention

P501 - Dispose of contents/container to an authorised waste collection point : 10% of the mixture consists of ingredient(s) of unknown acute oral toxicity

10% of the mixture consists of ingredient(s) of unknown acute dermal toxicity 10% percent of the mixture consists of ingredient(s) of unknown acute inhalation (dust/mist)

toxicity

Child-resistant fastening : No Tactile warning : No

Unknown acute toxicity (CLP: Classification,

2.3. Other hazards

Labelling, Packaging.) - SDS

PBT: not yet assessed vPvB: not yet assessed

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SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Polybutene	(CAS No) 9003-29-6 (EC no) 500-004-7	1 - 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319
bis(nonylphenyl)amine	(CAS No) 36878-20-3 (EC no) 253-249-4	0.05 - 1	Aquatic Chronic 4, H413
zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate)	(CAS No) 2215-35-2 (EC no) 218-679-9	0.05 - 1	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts	(CAS No) 84605-29-8 (EC no) 283-392-8	0.05 - 1	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411
Phenyl, dodecyl-,branched	(CAS No) 121158-58-5 (EC no) 310-154-3	0.005 - 0.1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361f Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Diphenylamine	(CAS No) 122-39-4 (EC no) 204-539-4 (EC index no) 612-026-00-5	0.005 - 0.1	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:dust,mist), H331 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-phrases: 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 : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position

comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Do NOT induce vomiting

unless directed to do so by medical personnel.

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

Symptoms/injuries after eye contact : Causes serious eye 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 : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No particular fire or explosion hazard.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Do not allow run-off from fire fighting to enter

drains or water courses.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Use

self-contained breathing apparatus. Wear fire/flame resistant/retardant clothing. EN469.

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 : Chemical goggles or safety glasses. Wear suitable gloves.

Emergency procedures : Evacuate unnecessary personnel.

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6.1.2. For emergency responders

Protective equipment : Chemical goggles or safety glasses. Wear suitable gloves.

Emergency procedures : Stop leak if safe to do so. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Do not discharge into drains or the environment.

6.3. Methods and material for containment and cleaning up

For containment : Do not allow minor leaks or spills to accumulate on walking surfaces. 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. Collect spillage.

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 : Ensure good ventilation of the work station. Wear proper protective equipment. Avoid all eye

and skin contact and do not breathe vapour and mist.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash your hands immediately after

handling this product, and once again before leaving the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container. Keep container closed when not in use.

Incompatible products : strong oxidizers.

Heat and ignition sources : Keep away from heat, sparks and flame.

Prohibitions on mixed storage : Incompatible materials.

Storage area : Store in dry, cool, well-ventilated area.

7.3. Specific end use(s)

Lubricant oil.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Diphenylamine (122-39	9-4)	
Austria	MAK (mg/m³)	5 mg/m³ (einatembare Fraktion), (H)
Austria	MAK (ppm)	0.7 ppm (einatembare Fraktion), (H)
Austria	MAK Short time value (mg/m³)	10 mg/m³ (einatembare Fraktion) max. 4x15 min./Schicht, (H)
Austria	MAK Short time value (ppm)	1.4 ppm (einatembare Fraktion) max. 4x15 min./Schicht, (H)
Belgium	Limit value (mg/m³)	10 mg/m³
Czech Republic	Expoziční limity (PEL) (mg/m³)	10 mg/m³
Czech Republic	Expoziční limity (NPK-P) (mg/m³)	20 mg/m ³
Czech Republic	Remark (CZ)	D, P
Denmark	Grænseværdie (langvarig) (mg/m³)	5 mg/m³
Denmark	Grænseværdie (kortvarig) (mg/m³)	10 mg/m ³
Finland	HTP-arvo (8h) (mg/m³)	5 mg/m³
Finland	HTP-arvo (15 min)	10 mg/m ³
France	VME (mg/m³)	10 mg/m³
Ireland	OEL (8 hours ref) (mg/m³)	10 mg/m³
Ireland	OEL (15 min ref) (mg/m3)	20 mg/m ³
Lithuania	IPRV (mg/m³)	4 mg/m³
Lithuania	TPRV (mg/m³)	12 mg/m ³
Spain	VLA-ED (mg/m³)	10 mg/m³
Spain	Notes	S
Sweden	nivågränsvärde (NVG) (mg/m³)	4 mg/m³
Sweden	kortidsvärde (KTV) (mg/m³)	12 mg/m³
United Kingdom	WEL TWA (mg/m³)	10 mg/m³
United Kingdom	WEL STEL (mg/m³)	20 mg/m³

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Diphenylamine (122-39-4)		
Norway	Grenseverdier (AN) (mg/m³)	5 mg/m³
Switzerland	VME (mg/m³)	10 mg/m³
Switzerland	Remark (CH)	(inhalable aerosol)

8.2. Exposure controls

Appropriate engineering controls : Avoid splashing. Ensure good ventilation of the work station. Eyewash stations.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear suitable gloves resistant to chemical penetration. EN374

Eye protection : Chemical goggles or safety glasses. EN166
Skin and body protection : Foot protection. Long sleeved protective clothing

Respiratory protection : In case of inadequate ventilation wear respiratory protection. Use an approved respirator

equipped with oil/mist cartridges. EN 12083

Environmental exposure controls : Prevent leakage or spillage. Avoid release to the environment.

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 Appearance : Clear liquid. Colour : brown. Odour petroleum. Odour threshold No data available : No data available Relative evaporation rate (butyl acetate=1) : No data available : No data available Melting point : No data available Freezing point : > 260 °C **Boiling point** Flash point : 223.88 °C : No data available Auto-ignition temperature Decomposition temperature : No data available Flammability (solid, gas) : No data available : No data available Vapour pressure Relative vapour density at 20 °C : No data available Relative density : No data available Density : 0.861 g/ml Solubility : No data available Log Pow : No data available Viscosity, kinematic : 157 cSt @ 40 °C Viscosity, dynamic : No data available Explosive properties : No data available Oxidising properties : No data available Explosive limits : No data available

9.2. Other information

VOC content : 0 %

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.

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10.4. Conditions to avoid

Extremely high or low temperatures.

Incompatible materials 10.5.

Strong oxidizers.

Hazardous decomposition products

None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

bis(nonylphenyl)amine (36878-20-3)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg

zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) (2215-35-2)	
LD50 oral rat	2000 - 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

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	
Polybutene (9003-29-6)		
LD50 oral rat	> 34600 mg/kg	
LD50 dermal rabbit	> 10250 mg/kg	
LC50 inhalation rat (mg/l)	> 17300 mg/m³	

Unknown acute toxicity (CLP: Classification, Labelling, Packaging.) - SDS

: 10% of the mixture consists of ingredient(s) of unknown acute oral toxicity 10% of the mixture consists of ingredient(s) of unknown acute dermal toxicity

10% percent of the mixture consists of ingredient(s) of unknown acute inhalation (dust/mist)

toxicity

Skin corrosion/irritation : Not classified

: Causes serious eye irritation. Serious eye damage/irritation

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 : Not classified

exposure)

Aspiration hazard : Not classified

Lucas Synthetic SAE 10W-60 Motor Oil	
Viscosity, kinematic	157 mm ² /s @ 40 °C

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Harmful to aquatic life with long lasting effects.

bis(nonylphenyl)amine (36878-20-3)		
LC50 fish 1	> 100 mg/l	
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)		
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	
Diphenylamine (122-39-4)		
LC50 fish 1	4.14 ppm	
EC50 Daphnia 1	2.46 mg/l	
EC50 other aquatic organisms 1	0.36 mg/l	

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Polybutene (9003-29-6)	
LC50 fish 1	> 1000 mg/l
EC50 Daphnia 1	> 1000 mg/l

12.2. Persistence and degradability

Lucas Synthetic SAE 10W-60 Motor Oil		
Persistence and degradability	May cause long-term adverse effects in the environment.	
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)		
Biodegradation	1.5 % 28 days	
Diphenylamine (122-39-4)		
Persistence and degradability	Not established.	
Polybutene (9003-29-6)		
Persistence and degradability	This product is not expected to be biodegradable.	

12.3. Bioaccumulative potential

Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)		
Log Kow	0.56	
Diphenylamine (122-39-4)		
Bioaccumulative potential	Not established.	
Polybutene (9003-29-6)		
Bioaccumulative potential	This product is not bioaccumulating.	

12.4. Mobility in soil

Polybutene (9003-29-6)	
Ecology - soil	This material has low solubility and floats and is not expected to partition to water.

12.5. Results of PBT and vPvB assessment

Lucas Synthetic SAE 10W-60 Motor Oil		
PBT: not yet assessed		
vPvB: not yet assessed		

12.6. Other adverse effects

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.

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : For disposal within the EC, the appropriate code according to the European Waste Catalogue

(EWC) should be used.

H code : H14 - 'Ecotoxic': waste which presents or may present immediate or delayed risks for one or

more sectors of the environment.

H4 - 'Irritant': non-corrosive substances and preparations which, through immediate, prolonged

or repeated contact with the skin or mucous membrane, can cause inflammation.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not considered a dangerous good for transport regulations

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

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IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

No data available

- Transport by sea

No data available

- Air transport

No data available

- Inland waterway transport

No data available

- Rail transport

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : 0 %

15.1.2. National regulations

Germany

VwVwS Annex reference : Water hazard class (WGK) 2, hazard to waters (Classification according to VwVwS, Annex 4)

WGK remark : Classification based on the components in compliance with Verwaltungsvorschrift

wassergefährdender Stoffe (VwVwS)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts ,Phenyl,

dodecyl-, branched are listed

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: Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts ,Phenyl, SZW-lijst van mutagene stoffen

dodecyl-, branched are listed

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Borstvoeding

: None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Vruchtbaarheid

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling

: None of the components are listed

: None of the components are listed

Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed

Recommendations Danish Regulation : Pregnant/breastfeeding women working with the product must not be in direct contact with the

product

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Original Document.

Abbreviations and acronyms:

ATE: Acute Toxicity Estimate
CAS (Chemical Abstracts Service) number
CLP: Classification, Labelling, Packaging.
EC50: Environmental Concentration associated with a response by 50% of the test population.
GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
LD50: Lethal Dose for 50% of the test population
STEL: Short Term Exposure Limits
WEL: Workplace Exposure Limit

Data sources : Component Supplier SDSs.

> European Chemicals Agency (ECHA) C&L Inventory database. Accessed at http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database.

European Chemicals Agency (ECHA) Registered Substances list. European Standards: Personal Protective Equipment; accessed at:

http://ec.europa.eu/enterprise/policies/european-standards/harmonised-standards/personal-

protective-equipment/index_en.htm.

Internal Company test data.

Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing",

Fifth Edition.

Other information : None.

Full text of H- and EUH-statements:

Acute toxicity (dermal), Category 3		
Acute toxicity (inhalation:dust,mist) Category 3		
Acute toxicity (oral), Category 3		
Hazardous to the aquatic environment — Acute Hazard, Category 1		
Hazardous to the aquatic environment — Chronic Hazard, Category 1		
Hazardous to the aquatic environment — Chronic Hazard, Category 2		
Hazardous to the aquatic environment — Chronic Hazard, Category 3		
Hazardous to the aquatic environment — Chronic Hazard, Category 4		
Serious eye damage/eye irritation, Category 1		
Serious eye damage/eye irritation, Category 2		
Reproductive toxicity, Category 2		
Skin corrosion/irritation, Category 2		
Specific target organ toxicity — Repeated exposure, Category 2		
Toxic if swallowed		
Toxic in contact with skin		
Causes skin irritation		
Causes serious eye damage		
Causes serious eye irritation		

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H331	Toxic if inhaled
H361f	Suspected of damaging fertility
H373	May cause damage to organs through prolonged or repeated exposure
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
H412	Harmful to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Eye Irrit. 2	H319	Calculation method
Aquatic Chronic 3	H412	Calculation method

Redstone SDS EU CLP for Lucas Oil

SDS prepared by: The Redstone Group, LLC.

6077 Frantz Rd. Suite 206

Dublin, Ohio, USA 43016 614.923.7472

www.redstonegrp.com

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

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