Lucas Complete Engine Treatment

Safety Data Sheet

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

Date of issue: 05/11/2016 Version: 1.0

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

1.1. Identification

Product form : Mixture

Product name : Lucas Complete Engine Treatment

Other means of identification : Part number: 10016

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

Use of the substance/mixture : Fuel System Cleaner and Lubricant

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 - 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

Flam. Liq. 4 H227 - Combustible liquid
Asp. Tox. 1 H304 - May be fatal if swallowed and enters airways

Full text of H statements : see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :

GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) :
H227 - Combustible liquid
H304 - May be fatal if swallowed and enters airways

Precautionary statements (GHS-US) :
P210 - Keep away from heat, sparks, open flames. - No smoking
P280 - Wear eye protection, protective gloves
P301+P310 - If swallowed: Immediately call a doctor
P331 - Do NOT induce vomiting
P370+P378 - In case of fire: Use carbon dioxide (CO2), Dry chemical, foam to extinguish
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to an approved waste disposal plant

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Distillates (petroleum), hydrotreated light	(CAS No) 64742-47-8	35 – 45	Flam. Liq. 4, H227 Asp. Tox. 1, H304
Hydrocarbyl amine		0.5 – 5	Aquatic Chronic 3, H412

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

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If medical advice is needed, have product container or label at hand. 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. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing.

First-aid measures after ingestion : Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Risk of aspiration pneumonia. If vomiting occurs have person lean forward.

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

Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways. Abdominal cramps. Risk of aspiration pneumonia.

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.

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 : Combustible liquid. Flammable vapours may accumulate in the container. Heavier than air, vapours may travel long distances along ground, ignite and flash back to source.

Explosion hazard : May form flammable/explosive vapour-air mixture. Flammable vapours heavier than air/can accumulate.

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.

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 : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking. 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

Do not discharge into drains or 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. Stop leak if safe to do so.

Methods for cleaning up : Absorb and/or contain spill with inert material, then place in suitable container.

6.4. Reference to other sections

Section 7: safe handling. Section 8: personal protective equipment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable. Keep away from Sources of ignition. - No smoking. Flammable vapours heavier than air/can accumulate. Vapour could travel to source of ignition and flash back.

Precautions for safe handling : No open flames. No smoking. 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. Handle in accordance with good industrial hygiene and safety procedures.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed.

Storage conditions : Keep in fireproof place. Keep container closed when not in use.

Incompatible products : Oxidizer.

Incompatible materials : Heat sources.

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.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Lucas Complete Engine Treatment	
ACGIH	Not applicable
OSHA	Not applicable

Hydrocarbyl amine	
ACGIH	Not applicable
OSHA	Not applicable

Distillates (petroleum), hydrotreated light (64742-47-8)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

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

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Use rubber gloves. nitrile rubber gloves. neoprene gloves.

Eye protection : Chemical goggles or safety glasses.

Respiratory protection : No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Disposable half mask. Use an approved respirator equipped with oil/mist cartridges. Appropriate self-contained breathing apparatus may be required.

Environmental exposure controls : Prevent leakage or spillage. Prevent contaminated water run-off.

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 : amber

Odour : petroleum

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	:	>= 71.1 °C
Relative evaporation rate (butyl acetate=1)	:	No data available
Flammability (solid, gas)	:	No data available
Explosive limits	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Vapour pressure	:	No data available
Relative density	:	0.837
Relative vapour density at 20 °C	:	No data available
Solubility	:	insoluble in water.
Log Pow	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity	:	No data available
Viscosity, kinematic	:	8.52 cSt @ 40 °C
Viscosity, dynamic	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Combustible liquid. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Open flame. Overheating. Direct sunlight. Heat. Sparks.

10.5. Incompatible materials

Oxidizer.

10.6. Hazardous decomposition products

May release flammable gases. Incomplete combustion will generate : Carbon oxides (CO, CO2). Aldehydes. hydrogen sulphide. Mercaptans.

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 light (64742-47-8)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified

Distillates (petroleum), hydrotreated light (64742-47-8)	
IARC group	Not listed in carcinogenicity class
National Toxicology Program (NTP) Status	Not listed in carcinogenicity class

Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	May be fatal if swallowed and enters airways.
Symptoms/injuries after ingestion	:	May be fatal if swallowed and enters airways. Abdominal cramps. Risk of aspiration pneumonia.

SECTION 12: Ecological information

12.1. Toxicity

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

Hydrocarbyl amine	
LC50 fish 1	31 mg/l 96 h
EC50 Daphnia 1	> 100 mg/l 48 h

12.2. Persistence and degradability

Lucas Complete Engine Treatment	
Persistence and degradability	Not established.

Hydrocarbyl amine	
Persistence and degradability	Not readily biodegradable.

12.3. Bioaccumulative potential

Lucas Complete Engine Treatment	
Bioaccumulative potential	Not established.

Distillates (petroleum), hydrotreated light (64742-47-8)	
Log Kow	2.1 - 5
Bioaccumulative potential	Bioaccumulative potential.

12.4. Mobility in soil

Lucas Complete Engine Treatment	
Ecology - soil	No additional information available.

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.
Additional information	:	Handle empty containers with care because residual vapours are flammable.
Ecology - waste materials	:	Hazardous waste due to toxicity.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description	:	NA1993 Combustible liquid, n.o.s. (Distillates, petroleum, hydrotreated light), 3, III
UN-No.(DOT)	:	NA1993
Proper Shipping Name (DOT)	:	Combustible liquid, n.o.s. Distillates, petroleum, hydrotreated light
Transport hazard class(es) (DOT)	:	3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Packing group (DOT)	:	III - Minor Danger
DOT Packaging Non Bulk (49 CFR 173.xxx)	:	203
DOT Packaging Bulk (49 CFR 173.xxx)	:	241
DOT Symbols	:	D - Proper shipping name for domestic use only, or to and from Canada,G - Identifies PSN requiring a technical name

DOT Special Provisions (49 CFR 172.102)	:	IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672) T1 - 1.5 178.274(d)(2) Normal..... 178.275(d)(2) T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / (1 + a (tr - tf)) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling
DOT Packaging Exceptions (49 CFR 173.xxx)	:	150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	220 L
DOT Vessel Stowage Location	:	A - The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel
Emergency Response Guide (ERG) Number	:	128
Other information	:	No supplementary information available.

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Hydrocarbyl amine
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Distillates (petroleum), hydrotreated light (64742-47-8)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Hydrocarbyl amine
Listed on the Canadian DSL (Domestic Substances List) inventory

Distillates (petroleum), hydrotreated light (64742-47-8)
Listed on the Canadian DSL (Domestic Substances List) inventory

EU-Regulations

Distillates (petroleum), hydrotreated light (64742-47-8)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Distillates (petroleum), hydrotreated light (64742-47-8)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the AICS (Australian Inventory of Chemical Substances) Listed on Taiwan National Chemical Inventory Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on KECI (Korean Existing Chemicals Inventory) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

15.3. US State regulations

No additional information available

SECTION 16: Other information

Data sources : ACGIH (American Conference of Government Industrial Hygienists).

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.

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

Manufacturer Information.

National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition.

OSHA 29CFR 1910.1200 Hazard Communication Standard.

Abbreviations and acronyms : ATE: Acute Toxicity Estimate.

CAS (Chemical Abstracts Service) number.

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.

OSHA: Occupational Safety & Health Administration.

STEL: Short Term Exposure Limits.

TSCA: Toxic Substances Control Act.

TWA: Time Weighted Average.

Other information : None.

Full text of H-statements:

H227	Combustible liquid
H304	May be fatal if swallowed and enters airways
H412	Harmful to aquatic life with long lasting effects

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

NFPA fire hazard : 2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.

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

Redstone SDS US GHS 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