SAFETY DATA SHEET

Lucas Semi-Synthetic 2-Cycle Oil

Section 1. Identification

GHS product identifier : Lucas Semi-Synthetic 2-Cycle Oil

Other means of identification : Not available.

Product number : 10058, 10059, 10110, 10115, 10120, 10125

Identified uses

Fuel/Lubricating Oil

Supplier's details : Lucas Oil Products, Inc
302 North Sheridan Street
Corona, California 92880-2067
Toll Free: (800) 342-2512
Tel: (951) 270-0154
Fax: (951) 270-1902
Website: www.LucasOil.com

Emergency telephone number (with hours of operation) : (951) 493-1149
(951) 847-5949
Markn@lucasoil.com

7:00A.M. to 5:00P.M. Monday thru Friday

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 4
ASPIRATION HAZARD - Category 1

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : Combustible liquid.
May be fatal if swallowed and enters airways.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Wear protective gloves. Wear eye or face protection. Keep away from flames and hot surfaces. - No smoking.

Response : IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.

Section 2. Hazards identification

Storage : Store locked up. Store in a well-ventilated place. Keep cool.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available.

CAS number/other identifiers

CAS number : Not applicable.

Product code : 10058, 10059, 10110, 10115, 10120, 10125

Ingredient name	%	CAS number
Solvent naphtha (petroleum), medium aliph.	10 - 30	64742-88-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Flush contaminated skin with plenty of water. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Section 4. First aid measures

Eye contact	:	No known significant effects or critical hazards.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	No known significant effects or critical hazards.
Ingestion	:	May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

Eye contact	:	No known significant effects or critical hazards.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	No known significant effects or critical hazards.
Ingestion	:	Adverse symptoms may include the following: nausea or vomiting

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	:	No specific treatment.
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	:	Use dry chemical, CO_2, water spray (fog) or foam.
Unsuitable extinguishing media	:	Straight streams of water.
Specific hazards arising from the chemical	:	Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
Hazardous thermal decomposition products	:	carbon monoxide, carbon dioxide and oxides of manganese.
Special protective actions for fire-fighters	:	Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Section 6. Accidental release measures

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Solvent naphtha (petroleum), medium aliph.	OSHA PEL (United States, 2/2013). TWA: 100 ppm 8 hours. TWA: 400 mg/m³ 8 hours.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state	:	Liquid. [Clear.]
Color	:	Blue-Green.
Odor	:	Petroleum solvent
Odor threshold	:	Not available.
pH	:	Not available.
Melting point	:	Not available.
Boiling point	:	191.11 to 211.11°C (376 to 412°F)
Flash point	:	Closed cup: 83.33°C (182°F)
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Lower and upper explosive (flammable) limits	:	Not available.
Vapor pressure	:	Not available.
Vapor density	:	Not available.
Relative density	:	0.866
Solubility	:	Negligible at 25°C
Partition coefficient: n-octanol/water	:	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Viscosity	:	Kinematic (100°C (212°F)): 0.075 cm^2/s (7.5 cSt)

Section 10. Stability and reactivity

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	The product is stable.
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	Excessive heat, flames and sparks.
Incompatible materials	:	Reactive or incompatible with the following materials: Strong oxidizers, exposure to light.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

There is no data available.

Irritation/Corrosion

There is no data available.

Section 11. Toxicological information

Sensitization

There is no data available.

Carcinogenicity

There is no data available. Specific target organ toxicity (single exposure) There is no data available. Specific target organ toxicity (repeated exposure) There is no data available.

Aspiration hazard

Name	Result
Solvent naphtha (petroleum), medium aliph.	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : Adverse symptoms may include the following:
nausea or vomiting

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate effects : No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Section 11. Toxicological information

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential

There is no data available.

Mobility in soil

Soil/water partition coefficient (K_{OC}) : There is no data available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	NA1993	Not regulated.	Not regulated.
UN proper shipping name	COMBUSTIBLE LIQUID, N.O.S. (Solvent naphtha (petroleum), medium aliph.)	-	-
Transport hazard class(es)	Combustible liquid.	-	-

Section 14. Transport information

Packing group	III	-	-
Environmental hazards	No.	No.	No.
Additional information	Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials.	-	-

AERG : 128

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: All components are listed or exempted.

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Fire hazard

Composition/information on ingredients

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : The following components are listed: Distillates (petroleum), hydrotreated heavy paraffinic; Residual oils (petroleum), solvent-dewaxed; Residual oils (petroleum), hydrotreated; Distillates (petroleum), solvent-dewaxed heavy paraffinic

Pennsylvania : None of the components are listed.

California Prop. 65

Section 15. Regulatory information

No products were found.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health : 1 * Flammability : 2 Physical hazards : 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health : 1 Flammability : 2 Instability : 0

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History

Date of issue mm/dd/yyyy : 05/15/2014

Version : 1

Revised Section(s) : Not applicable.

Prepared by : KMK Regulatory Services Inc.

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

SAFETY DATA SHEET

CITGO AW Hydraulic Oil 32

Section 1. Identification

GHS product identifier : CITGO AW Hydraulic Oil 32

Synonyms : Hydraulic Fluid

Code : 633491001

Supplier's details : CITGO Petroleum Corporation
P.O. Box 4689
Houston, TX 77210
sdsvend@citgo.com

Emergency telephone number : Technical Contact: (800) 248-4684
Medical Emergency: (832) 486-4700
CHEMTREC Emergency: (800) 424-9300
(United States Only)

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : Warning

Hazard statements : Injection under the skin can cause severe injury.
Most damage occurs in the first few hours.
Initial symptoms may be minimal.

Precautionary statements

General : Avoid contact with eyes, skin and clothing. MAY BE HARMFUL IF SWALLOWED. IF IN EYES: Rinse cautiously with water for several minutes. Do NOT induce vomiting. After handling, always wash hands thoroughly with soap and water. If you feel unwell, seek medical attention and show the label when possible. Keep out of reach of children.

Prevention : Not applicable.

Response : Not applicable.

Storage : Store in a dry place and/or in closed container. Store in accordance with all local, regional, national and international regulations.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : Injection of petroleum hydrocarbons requires immediate medical attention

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Hydraulic Fluid

CAS number/other identifiers

CAS number : Not applicable.

Section 3. Composition/information on ingredients

Any concentration shown as a range is to protect confidentiality or is due to process variation.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : Injection of pressurized hydrocarbons can cause severe permanent tissue damage. Initial symptoms may be minor.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : Treat symptomatically and supportively.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Section 5. Fire-fighting measures

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Bulk Storage Conditions: Maintain all storage tanks in accordance with applicable regulations. Use necessary controls to monitor tank inventories. Inspect all storage tanks on a periodic basis. Test tanks and associated piping for tightness. Maintain the automatic leak detection devices to assure proper working condition.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None identified.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, vapor controls, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection : Chemical-resistant gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Avoid skin contact with liquid. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Leather boots are not protective for liquid contact.

Respiratory protection : Avoid inhalation of gases, vapors, mists or dusts. Use a properly fitted, air-purifying or supplied-air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Physical state : Liquid.

Color : Light amber [Light]

Odor : Mild petroleum odor [Slight]

pH : Not applicable.

Boiling point/boiling range : Not available.

Flash point : Open cup: 214°C (417.2°F) [Cleveland.]

Lower and upper explosive (flammable) limits : Not available.

Vapor pressure : Not available.

Vapor density : Not available.

Relative density : Not available.

Density lbs/gal : 7.14 lbs/gal

Gravity, °API : 33.6

Section 9. Physical and chemical properties

Viscosity : Dynamic (room temperature): Not applicable.
Kinematic (room temperature): Not applicable.
Kinematic (40°C (104°F)): 0.32 cm^2/s (32 cSt)

Viscosity SUS : 155 SUS @100 F

Section 10. Stability and reactivity

Reactivity : Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide under US GHS Definition(s).

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Conclusion/Summary : **Distillates (petroleum), hydrotreated heavy paraffinic**: Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects.

Irritation/Corrosion

Skin : No additional information.

Eyes : No additional information.

Respiratory : No additional information.

Sensitization

Skin : No additional information.

Respiratory : No additional information.

Mutagenicity

Conclusion/Summary : No additional information.

Carcinogenicity

Conclusion/Summary : No additional information.

Reproductive toxicity

Conclusion/Summary : No additional information.

Teratogenicity

Conclusion/Summary : No additional information.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Section 11. Toxicological information

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : Injection of pressurized hydrocarbons can cause severe permanent tissue damage. Initial symptoms may be minor.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Section 12. Ecological information

Toxicity

Conclusion/Summary : Not available.

Persistence and degradability

Conclusion/Summary : Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

U.S. Federal regulations : **United States inventory (TSCA 8b)**: All components are listed or exempted.

Clean Water Act (CWA) 307: Zinc and zinc compounds; Toluene; Phenol

Clean Water Act (CWA) 311: Toluene; Phenol

This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
Phenol	<0.001	Yes.	500 / 10000	-	1000	-

Section 15. Regulatory information

SARA 304 RQ : 106837606.8 lbs / 48504273.5 kg [14899387.7 gal / 56400318 L]

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

California Prop. 65

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer.
WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	%	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Toluene	<0.01	No.	Yes.	No.	7000 µg/day (ingestion)
ethyl acrylate	<0.001	Yes.	No.	No.	No.

International regulations

International lists : **Australia inventory (AICS)**: All components are listed or exempted.
China inventory (IECSC): All components are listed or exempted.
Japan inventory: All components are listed or exempted.
Korea inventory: All components are listed or exempted.
Malaysia Inventory (EHS Register): Not determined.
New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.
Philippines inventory (PICCS): All components are listed or exempted.
Taiwan inventory (CSNN): Not determined.

Canada inventory : All components are listed or exempted.

EU Inventory : All components are listed or exempted.

WHMIS (Canada) : Not controlled under WHMIS (Canada).

Section 16. Other information

National Fire Protection Association (U.S.A.)

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of issue/Date of revision : 5/20/2015.

Section 16. Other information

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Notice to reader

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Mobil 1 10W-30
Mobil Passenger Vehicle Lube, United States

Advanced Full Synthetic Engine Oil

Product Description

Mobil 1 10W-30 is an advanced full synthetic engine oil designed to keep engines running like new by providing exceptional cleaning power, wear protection and overall performance. Mobil 1 10W-30 meets or exceeds the requirements of the latest industry standards required by modern gasoline engines. Mobil 1 technology comes as standard equipment in many different vehicles, including select high-performance vehicles

Features and Potential Benefits

Mobil 1 10W-30 is made with a proprietary blend of ultra high performance synthetic basestocks fortified with a precisely balanced additive component system. This oil is uniquely designed to help provide unsurpassed levels of performance, cleaning power and engine protection, while meeting the demanding ILSAC GF-5 performance standards. Key features and potential benefits include:

Features	**Advantages and Potential Benefits**
Advanced Full synthetic formula	Helps prevent deposits and sludge build-up to enable long engine life Excellent overall lubrication and wear protection performance for many driving styles
Outstanding thermal and oxidation stability	Outstanding performance during the maximum oil change interval recommended in a vehicle’s owners manual
Enhanced frictional properties	Aids fuel economy
Excellent low temperature capabilities	Quick cold weather starting for ultra fast protection Helps to extend engine life

Applications

Mobil 1 10W-30 is recommended for all types of modern vehicles, including high-performance turbo-charged, supercharged gasoline and diesel multi-valve fuel injected engines found in passenger cars, SUVs, light vans and trucks.

- 10W-30 is the recommended viscosity grade for a variety of SUV, light van and truck engines, as well as a number of older model passenger cars.

- Mobil 1 10W-30 is not recommended for 2-Cycle or aviation engines, unless specifically approved by the manufacturer.

Specifications and Approvals

Mobil 1 10W-30 meets or exceeds the requirements of:	
ACEA	A1/B1
API	SN,SM,SL,SJ
ILSAC	GF-5

According to ExxonMobil, Mobil 1 10W-30 is of the following quality level	
General Motors	GM 4718M
General Motors	GM 6094M
API	CF

Typical Properties

Mobil 1 10W-30	
SAE Grade	10W-30
Viscosity @ 100ºC, cSt (ASTM D445)	10.1
Viscosity, @ 40ºC, cSt (ASTM D445)	63.2
Viscosity Index	146
Sulfated Ash, wt% (ASTM D874)	0.8
HTHS Viscosity, mPa•s @ 150ºC (ASTM D4683)	3.0
Pour Point, ºC (ASTM D97)	-42
Flash Point, ºC (ASTM D92)	232
Density @15.6 ºC, g/ml (ASTM D 4052)	0.859

Health and Safety

Based on available information, this product is not expected to produce adverse effects on health when used for the applications referred to above and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDS's are available upon request through your sales contact office, or via the Internet. This product should not be used for purposes other than the applications referred to above. If disposing of used product, take care to protect the environment.

Exxon Mobil Corporation
22777 Springwoods Village Parkway
Spring TX 77389

1-800-ASK MOBIL (275-6624)

Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local ExxonMobil contact or visit www.exxonmobil.com

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29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : Valvoline™ DIESEL TURBO 15W40 MOTOR OIL

Recommended use of the chemical and restrictions on use

Use of the Substance/Mixture : lubricant

Details of the supplier of the safety data sheet	**Emergency telephone number** 1-800-VALVOLINE
Valvoline LLC 3499 Blazer Parkway Lexington, KY 40509 United States of America SDS@valvoline.com	**Regulatory Information Number** 1-800-TEAMVAL **Product Information** 1-800-TEAMVAL

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

GHS Label element

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	Not a hazardous substance or mixture.	78.07

SECTION 4. FIRST AID MEASURES

General advice	:	No hazards which require special first aid measures.
If inhaled	:	If breathed in, move person into fresh air. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	:	First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
In case of eye contact	:	Remove contact lenses. Protect unharmed eye.
If swallowed	:	Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	:	Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities. Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea) irritation (nose, throat, airways)
Notes to physician	:	No hazards which require special first aid measures.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray

Foam
Carbon dioxide (CO2)
Dry chemical

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : carbon dioxide and carbon monoxide
Hydrocarbons
various hydrocarbons

Specific extinguishing methods :

Product is compatible with standard fire-fighting agents.

Further information : Standard procedure for chemical fires.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Environmental precautions : Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

Other information : Comply with all applicable federal, state, and local regulations.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Smoking, eating and drinking should be prohibited in the application area.
For personal protection see section 8.

Conditions for safe storage : Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : No materials to be especially mentioned.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	PEL	500 ppm 2,000 mg/m3	OSHA_TRANS
		REL	5 mg/m3 Mist.	NIOSH/GUIDE
		STEL	10 mg/m3 Mist.	NIOSH/GUIDE
		PEL	5 mg/m3 Mist.	OSHA_TRANS
		TWA	5 mg/m3 Mist.	Z1A
		TWA	400 ppm 1,600 mg/m3	Z1A

Engineering measures : General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Eye protection : Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection : Wear as appropriate:
Safety shoes
Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures : General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Colour : amber

Odour : oily

Odour Threshold	:	No data available
pH	:	Not applicable
Pour point	:	-17 °F / -27 °C No data available
Boiling point/boiling range	:	> 482 °F / 250 °C (1,000 hPa)
Flash point	:	> 419.9 °F / > 215.5 °C
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper explosion limit	:	7 %(V) Calculated Explosive Limit
Lower explosion limit	:	0.5 %(V) Calculated Explosive Limit
Vapour pressure	:	25 hPaCalculated Vapor Pressure
Relative vapour density	:	No data available
Relative density	:	No data available
Density	:	0.883 g/cm3 (20 °C)
Solubility(ies)		
Water solubility	:	insoluble
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Thermal decomposition	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	107 mm2/s (40 °C)
Oxidizing properties	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	Stable under recommended storage conditions.
Possibility of hazardous reactions	:	Product will not undergo hazardous polymerization.
Incompatible materials	:	Strong oxidizing agents
Hazardous decomposition products		carbon dioxide and carbon monoxide Hydrocarbons

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation
Skin contact
Eye Contact
Ingestion

Acute toxicity
Not classified based on available information.
Components:
Distillates (petroleum), solvent-dewaxed heavy paraffinic**:**
Acute oral toxicity : LD 50 (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD 50 (Rabbit): > 5,000 mg/kg

Skin corrosion/irritation
Not classified based on available information.
Product:
Result: Repeated exposure may cause skin dryness or cracking.

Components:
Distillates (petroleum), solvent-dewaxed heavy paraffinic**:**
Result: Mildly irritating to skin

Serious eye damage/eye irritation
Not classified based on available information.
Product:
Remarks: Unlikely to cause eye irritation or injury.

Components:
Distillates (petroleum), solvent-dewaxed heavy paraffinic**:**
Result: Mildly irritating to eyes

Respiratory or skin sensitisation
Skin sensitisation: Not classified based on available information.
Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity
Not classified based on available information.
Carcinogenicity
Not classified based on available information.
Reproductive toxicity
Not classified based on available information.
STOT - single exposure
Not classified based on available information.
STOT - repeated exposure
Not classified based on available information.
Aspiration toxicity
Not classified based on available information.
Further information
Product:
Remarks: No data available

Carcinogenicity:

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
No data available
Persistence and degradability
No data available

Bioaccumulative potential
No data available

Mobility in soil
No data available

Other adverse effects
No data available

Product:

Additional ecological information	: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

General advice : Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.

SECTION 14. TRANSPORT INFORMATION

International transport regulations

REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.

U.S. DOT - ROAD

Not dangerous goods

CFR_RAIL_C

Not dangerous goods

U.S. DOT - INLAND WATERWAYS

Not dangerous goods

TDG_ROAD_C

Not dangerous goods

TDG_RAIL_C

Not dangerous goods

TDG_INWT_C

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

MX_DG

Not dangerous goods

***ORM = ORM-D, CBL = COMBUSTIBLE LIQUID**

Marine pollutant		no

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazards : No SARA Hazards

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
Component(s)SARA 313

California Prop 65 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

EINECS : On the inventory, or in compliance with the inventory

TSCA : On TSCA Inventory

AUSTR : On the inventory, or in compliance with the inventory

DSL : All components of this product are on the Canadian DSL.

ENCS : On the inventory, or in compliance with the inventory

KECL : On the inventory, or in compliance with the inventory

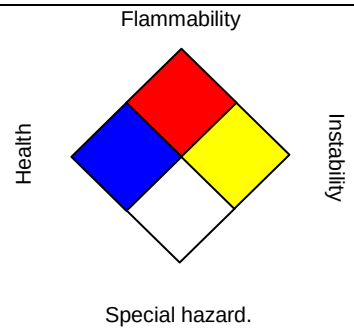
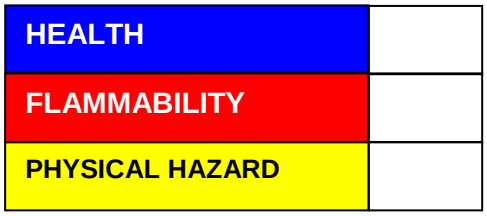
PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

Inventories
AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information
Revision Date: 07/31/2016

NFPA:	HMIS III:
	 0 = not significant, 1 =Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic

NFPA Flammable and Combustible Liquids Classification
Combustible Liquid Class IIIB

Full text of H-Statements referred to under sections 2 and 3.

Further information

Sources of key data used to compile the Safety Data Sheet
Valvoline internal data including own and sponsored test reports
The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Valvoline's Environmental Health and Safety Department (1-800-825-8654).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :
ACGIH : American Conference of Industrial Hygienists
BEI : Biological Exposure Index
CAS : Chemical Abstracts Service (Division of the American Chemical Society).
CMR : Carcinogenic, Mutagenic or Toxic for Reproduction
FG : Food grade
GHS : Globally Harmonized System of Classification and Labeling of Chemicals.

H-statement : Hazard Statement
IATA : International Air Transport Association.
IATA-DGR : Dangerous Goods Regulation by the “International Air Transport Association” (IATA).

ICAO : International Civil Aviation Organization
ICAO-TI (ICAO) : Technical Instructions by the “International Civil Aviation Organization”
IMDG : International Maritime Code for Dangerous Goods
ISO : International Organization for Standardization
logPow : octanol-water partition coefficient
LCxx : Lethal Concentration, for xx percent of test population
LDxx : Lethal Dose, for xx percent of test population.
ICxx : Inhibitory Concentration for xx of a substance
Ecxx : Effective Concentration of xx
N.O.S.: Not Otherwise Specified
OECD : Organization for Economic Co-operation and Development
OEL : Occupational Exposure Limit
P-Statement : Precautionary Statement
PBT : Persistent , Bioaccumulative and Toxic
PPE : Personal Protective Equipment
STEL : Short-term exposure limit
STOT : Specific Target Organ Toxicity
TLV : Threshold Limit Value
TWA : Time-weighted average
vPvB : Very Persistent and Very Bioaccumulative
WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act
DOT : Department of Transportation
FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act
HMIRC : Hazardous Materials Information Review Commission
HMIS : Hazardous Materials Identification System
NFPA : National Fire Protection Association
NIOSH : National Institute for Occupational Safety and Health
OSHA : Occupational Safety and Health Administration
PMRA : Health Canada Pest Management Regulatory Agency
RTK : Right to Know
WHMIS : Workplace Hazardous Materials Information System