

Revision Date 15-June-2018
Version 5

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

GHS product identifier : Synthetic Heavy Duty API CJ-4 Synthetic Diesel Oil SAE 15W-40
Code : 53
Product type : Liquid.

Identified uses

Lubricating oil. Not to be misted.

Details of the supplier of the safety data sheet

Manufacturer Address : U.S. Lubricants, A Division of U.S. Venture, Inc.
425 Better Way
Appleton, WI 54915

Emergency telephone number

Company Phone Number 800-490-4900
24 Hour Emergency Phone Number 800-424-9300 (CHEMTREC 705487)

2. HAZARDS IDENTIFICATION

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

Classification of the substance or mixture : AQUATIC HAZARD (Acute) – Category 3
AQUATIC HAZARD (Long-term) – Category 3

GHS label elements

Signal word : No signal word.
Hazard statements : Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention : Avoid release to the environment.
Response : Not applicable.
Storage : Not applicable.
Disposal : Dispose of contents and containers in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified : None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture : Mixture
Other means of identification : Not available.

CAS number/other identifiers

CAS number : Not applicable.
Product code : 53

Ingredient name	%	CAS number
bis(Nonylphenyl)amine	1-5	36878-20-3
Zinc Dialkyldithiophosphate	1-5	84605-29-8
Benezenesulfonic acid, mono C-16-24-alkyl derivs., calcium salts	1-5	-
Diphenylamine	0.1-1	122-39-4
Alkylated phenol	0-0.1	121158-58-5

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.

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. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

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** : No known significant effects or critical hazards.

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** : No known significant effects or critical hazards.

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

- Notes to physician** : Treat symptomatically.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No special protection is required.

See toxicological information (Section 11)

5. FIRE-FIGHTING MEASURES

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include:
Carbon dioxide
Carbon monoxide
Nitrogen oxides
- Special protective actions for fire-fighters** : No special protection is required.
- 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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : 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 nonemergency 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). Water polluting material. May be harmful to the environment if release in large quantities.

Methods and materials for containment and cleaning up

- 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 via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid contact with used product. 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 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limits

Under conditions which may generate mists, the following exposure limits are recommended:
ACGIH TLV TWA: 5 mg/m³; STEL: 10 mg/m³.

United States

Ingredient name	Exposure limits
Diphenylamine	ACGIH TLV (United States, 3/2015). TWA: 10 mg/m ³ 8 hours. NIOSH REL (United States, 10/2013). TWA: 10 mg/m ³ 10 hours.

Canada

None.

- 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.

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. 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.

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.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

- Physical state** : Liquid. [Clear]
- Color** : Brown
- Odor** : Mild hydrocarbon.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point / Pour point** : -38°C (-36.4°F)
- Boiling point** : Not available.
- Flash point** : Open cup: 240°C (464°F) [Cleveland.]
- 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	: 0.8682
Solubility	: Not available.
Partition coefficient: n-octanol/ water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic: 0.154 cm ² /s (15.4 cSt) (100°C) Kinematic: 1.134 cm ² /s (113.2 cSt) (40°C)

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	: No specific data.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Zinc Dialkyldithiophosphate	LD50 Oral	Rat	3.2 g/kg	-
Diphenylamine	LD50 Dermal	Rabbit	>5000 mg/kg	-
Diphenylamine	LD50 Oral	Rat	1120 mg/kg	-

Irritation/Corrosion

There is no data available.

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)

Name	Category	Route of exposure	Target organs
Diphenylamine	Category 2	Not determined	Not determined

Aspiration hazard

There is no data available.

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	: No known significant effects or critical hazards.

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	: No known significant effects or critical hazards.

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.

Numerical measures of toxicity**Acute toxicity estimates**

Route	ATE value
Oral	227645.1 mg/kg

12. ECOLOGICAL INFORMATION**Toxicity**

Product/ingredient name	Result	Species	Exposure
Diphenylamine	Acute EC50 2.17 mg/L Fresh water	Algae - Pseudokirchneriella subcapitata – Exponential growth phase	72 hours
	Acute EC50 0.31 mg/L Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 2.2 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 0.37 mg/L Fresh water	Algae - Pseudokirchneriella subcapitata – Exponential growth phase	72 hours

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Bis(Nonylphenyl)amine	3.64 to 7.02	1730	High
Zinc Dialkyldithiophosphate	0.56	-	Low
Diphenylamine	3.5	151.36	Low
Alkylated phenol	6.1	1601	High

- Mobility in soil** : There is no data available.
Soil/water partition coefficient (K_{oc})
Other adverse effects : No known significant effects or critical hazards.

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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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	-	-	-

AERG: Not applicable.

- 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.

15. REGULATORY INFORMATION

- U.S. Federal regulations** : **United States inventory (TSCA 8b):** All components are listed or exempted.
Clean Water Act (CWA) 307: Zinc Dialkyldithiophosphate
- 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 : Not applicable.

Composition/information on ingredients

Name	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Zinc Dialkyldithiophosphate	No.	No.	No.	Yes.	No.
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	No.	No.	No.	Yes.	No.
Diphenylamine	No.	No.	No.	Yes.	Yes.
Alkylated phenol	No.	No.	No.	Yes.	Yes.

Sara 313

	Product Name	CAS number	%
Form R - Reporting requirements	Zinc Dialkyldithiophosphate	84605-29-8	1 - 5
Supplier notification	Zinc Dialkyldithiophosphate	84605-29-8	1 - 5

State regulations

Massachusetts : None of the components are listed
New York : None of the components are listed
New Jersey : The following components are listed: Zinc Dialkyldithiophosphate
Pennsylvania : None of the components are listed

California Prop. 65

No products were found.

Canada**Canadian lists**

Canadian NPRI : None of the components are listed.
CEPA Toxic substances : None of the components are listed.
Canada inventory : All components are listed or exempted.

16. OTHER INFORMATION

History

Date of issue mm/dd/yyyy : 06/15/2018
Date of previous issue : 08/15/2013
Version : 5
Prepared by : US Lubricants

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.

End of Safety Data Sheet