

ZDDP Oil Fortifier

Safety Data Sheet

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



SECTION 1: IDENTIFICATION OF PRODUCT/COMPANY/SUPPLIER

1.1 Product identifiers

Product name: ZDDP Oil Fortifier

1.2 Relevant identified uses of the product and restrictions on use

Recommended uses: Diesel Fuel Additive

Restrictions on use: For Industrial and Professional Use

1.3 Details of the supplier of the safety data sheet

Company name: Opti-Lube Inc.

Address: 1646 W Business Park Drive, Suite B

City/State/Zip: Orem, UT 84058, USA

Website: www.opti-lube.com

Phone number: 801-491-3717

1.4 Emergency response number

Hazmat Line: +1 656 208 0809

SECTION 2: HAZARDS IDENTIFICATION

2.1 GHS Hazard classification/statements according to [29 CFR 1910.1200](#) (OSHA):

Eye Damage, Category 1: H318 – Causes serious eye damage

Aquatic Chronic, Category 2: H411 – Toxic to aquatic life with long lasting effects

2.2 GHS Label Elements according to [29 CFR 1910.1200](#) (OSHA):

Pictogram:



Signal word: Warning

2.3 GHS Precautionary Statements according to [29 CFR 1910.1200](#) (OSHA):

P203: Obtain, read, and follow all safety instructions before use.

P264: Wash hands/skin thoroughly after handling.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

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

P391: Collect spillage.

P501: Dispose of contents/container to an approved waste disposal plant.

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2.4 Other Hazards

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

Chemical Name	CAS Number	Concentration
Petroleum distillates, solvent dewaxed	64742-65-0	45 – 60%
Zinc alkyl dithiophosphate	68649-42-3	15 – 20%
Highly refined mineral oil (C15 - C50)	Proprietary	5 – 10%
Petroleum distilled, heavy paraffinic	64742-54-7	5 – 10%
Paraffin oils	8012-95-1	1 – 5%
Phosphorodithioic acid	68649-42-3	0.1 – 1%

*The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret. There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

If Inhaled: No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

If Swallowed: No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

Eye contact: Flush eyes with water immediately while holding the eyelids open. Remove contact lenses, if worn, after initial flushing, and continue flushing for at least 15 minutes. Get immediate medical help.

Skin contact: Wash skin with water immediately and remove contaminated clothing and shoes. Get medical attention if any symptoms develop. To remove the material from skin, apply a waterless hand cleaner, mineral oil, or petroleum jelly. Then wash with soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

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4.2 Most important symptoms and effects, both acute and delayed

Contact with the eyes causes permanent damage, including blindness. Symptoms may include pain, tearing, reddening, swelling, and impaired vision.

4.3 Indication of any immediate medical attention and special treatment needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable methods: Use water fog, foam, dry chemical, or carbon dioxide (CO₂) to extinguish flames.

5.2 Specific hazards arising from the substance/mixture

Not flammable but will support combustion. Hazardous reactions will not occur under normal conditions.

5.3 Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire. In case of fire and/or explosion, do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment, and emergency procedures

Observe all relevant local and international regulations. Eliminate all sources of ignition in vicinity of spilled material. Keep out unnecessary and unprotected personnel. Persons entering the contaminated area to correct the problem or to determine whether it is safe to resume normal activities must comply with all instructions in the Exposure Controls/Personal Protection section.

6.2 Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3 Methods and materials for containment and cleaning up

Clean up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety instructions have been read and understood. Do not handle, store, or open near open flames, sources of heat, or sources of ignition. Protect material from direct sunlight. When using, do not smoke. The maximum handling temperature is 60°C.

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7.2 Conditions for safe storage, including any compatibilities

Store locked up. The maximum short-term (<2 week(s)) storage temperature is 60°C. The maximum long-term (>2 week(s)) storage temperature is 40°C.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure Controls

Occupational exposure limit values: Not established.

Engineering controls: Use general ventilation, local exhaust ventilation, or a combination of both.

8.2 Personal Protective Equipment



Hand protection: Wear appropriate chemical-resistant gloves.

Eye/Face protection: Wear safety glasses with side shields (or goggles) and a face shield.

Skin and body protection: Wear suitable protective clothing.

Respiratory protection: In case of insufficient ventilation, wear respiratory protection.

Hygiene measures: When using, do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Liquid
Color:	Brown
Odor:	Petroleum, slightly hydrocarbon
Odor Threshold:	Not determined
pH	Not determined
Melting Point:	Not determined
Boiling Point:	Not determined
Flash Point:	150 °C (303 °F)
Auto-ignition Temperature:	Not determined
Upper/Lower Explosive Limits:	Not determined
Vapor Pressure:	Not determined
Evaporation Rate:	Not determined
Flammability (Solid, Gas):	Not determined
Specific Gravity:	Not determined
Relative Density:	1.071 kg/l @ 15°C (59°F)
Solubility in Water:	Not determined
Partition Coefficient (n-octanol / water):	Not determined

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Decomposition Temperature:

Not determined

Viscosity

47 cSt @ 40°C (104°F)

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

10.2 Chemical stability

This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of Hazardous Reactions

No dangerous reactions known under conditions of normal use.

10.4 Conditions to avoid

Do not heat above flash point. Do not exceed handling and storage temperatures listed in SDS Section 7 (Handling and Storage).

10.5 Incompatible materials

Not applicable.

10.6 Hazardous decomposition products

Hazardous polymerization will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity: Not classified based on available information.

Skin corrosion/irritation: Not classified based on available information.

Serious eye damage/irritation: Causes serious eye damage.

Respiratory/Skin sensitization: Not classified based on available information.

Germ cell mutagenicity: No data is available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity: The material is not considered a carcinogen.

Reproductive toxicity: Not classified based on available information.

Specific target organ toxicity - single exposure: Not classified based on available information.

Specific target organ toxicity - repeated exposure: Not classified based on available information.

Aspiration hazard: Not classified based on available information.

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SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity

This material is expected to be toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

72 hour(s) EC50 (growth rate): 2.1 mg/l (WAF) (Selenastrum capricornutum)

12.2 Persistence and Degradability

This material is not expected to be readily biodegradable.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

The product is insoluble in water.

12.5 Other adverse effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Waste Disposal: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Dispose of in accordance with all Local, State, and Federal regulations.

Contaminated Packaging: Since emptied containers may retain product residues, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: TRANSPORT INFORMATION

14.1 Transport information

UN Number: UN3082

UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Transport Hazard Class: 9

Packing Group: III

Marine Pollutant: Environmental hazardous substance

Special precautions for users: No data available.

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SECTION 15: REGULATORY INFORMATION

15.1 Safety, health, and environment regulations/legislation specific for substance or mixture

US Federal Regulations: This product contains hazardous components as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substance Control Act (TSCA) Inventory: All substances in this product are either listed or are exempt from listing on the TSCA Inventory.

Comprehensive Response Compensation and Liability Act (CERCLA): Not regulated.

SARA 302/304 Emergency Planning & Notification: Not regulated.

SARA 311/312 Hazard: See Section 2 of this SDS for GHS hazards associated with this product.

SARA 313 (TRI Reporting): Not regulated.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List: Not regulated.

Clean Water Act (CWA) 311: Not regulated.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65):

This product does not contain any chemicals known to the State of California to cause birth defects or reproductive harm. For more information go to [\(Proposition 65 List of Chemicals\)](#).

SECTION 16: OTHER INFORMATION

16.1 General information

Revision Date: 2-Mar-2026

Previous Revision: 14-July-2020

Version number: 2.0

National Fire Protection Association (NFPA) Rating:



16.2 Full Text of Abbreviations

CAS – Chemical Abstract Service

GHS – Globally Harmonized System

CFR – Code of Federal Regulations

OSHA – Occupational Safety and Health Administration

NIOSH – The National Institute for Occupational Safety and Health

ACGIH – American Conference of Governmental Industrial Hygienists

UN – United Nations

TRI – Toxic Release Inventory

SARA – Superfunds Amendments and Reauthorization Act

SDS – Safety Data Sheet

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16.3 Disclaimer

The information on this SDS is based on data which is considered to be accurate. Opti-Lube Inc., however, makes no guarantees or warranty, either expressed or implied of the accuracy or completeness of this information. The conditions or methods of handling, storage, use and disposal of the products are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product. This SDS was prepared and is to be used for this product. If the product is used as a component in another product, this SDS information may not be applicable.