

# SAFETY DATA SHEET

XTREME/XHP MOLY ADD BLEND - RT003013

## Section 1. Identification

**Product name** : XTREME/XHP MOLY ADD BLEND - RT003013

**Product description** : base oil and additives

### Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** : Additive concentrate/slurry

**Uses advised against** : This product is not recommended for any industrial, professional or consumer use other than the identified uses above.

**Supplier** : EXXON MOBIL CORPORATION  
22777 Springwoods Village Parkway  
Spring, TX 77389 USA

**24-Hour emergency telephone number** : 1-800-424-9300 / +1 703-741-5970 / +1-703-527-3887 (CHEMTREC)

**Product Technical Information** : 800-662-4525

**SDS Internet Address** : [www.sds.exxonmobil.com](http://www.sds.exxonmobil.com)

## 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** : SERIOUS EYE DAMAGE - Category 1  
SKIN SENSITIZATION - Category 1  
TOXIC TO REPRODUCTION - Category 2

### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : H317 - May cause an allergic skin reaction.  
H318 - Causes serious eye damage.  
H361 - Suspected of damaging fertility or the unborn child.

### Precautionary statements

**Prevention** : P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P261 - Avoid breathing vapor.  
P272 - Contaminated work clothing must not be allowed out of the workplace.  
P280 - Wear protective gloves, protective clothing and eye or face protection.

**Response** : P302 + P352 - IF ON SKIN: Wash with plenty of water.  
P305 + P310, P351, P338 - IF IN EYES: Immediately call a POISON CENTER or doctor. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308 + P313 - IF exposed or concerned: Get medical advice or attention.  
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P363 - Wash contaminated clothing before reuse.

**Storage** : P405 - Store locked up.

**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

## Section 2. Hazards identification

- Contains** : zinc dialkyl dithiophosphate; benzenamine, n-phenyl-, reaction products with 2,4,4-trimethylpentene and naphthenic acids, zinc salts
- Hazards not otherwise classified** : None known.
- Note** : This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

## Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture

Ingredient name	% by weight	Identifiers
zinc dialkyl dithiophosphate	≤10	CAS: 68457-79-4
benzenamine, n-phenyl-, reaction products with 2,4,4-trimethylpentene	≤10	CAS: 68411-46-1
naphthenic acids, zinc salts	≤3	CAS: 12001-85-3
hydrotreated middle distillate (petroleum)	≤3	CAS: 64742-46-7
severely hydrotreated heavy paraffinic distillate	≤3	CAS: 64742-54-7
amines, c12-14-tert-alkyl	<1	CAS: 68955-53-3

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 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 10 minutes. Get medical attention immediately. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. 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. Remove contaminated clothing and shoes. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury. Wash clothing before reuse. Clean shoes thoroughly before reuse. Continue to rinse for at least 10 minutes. Get medical attention immediately. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Chemical burns must be treated promptly by a physician. Call a poison center or physician. Wash with plenty of soap and water. In the event of any complaints or symptoms, avoid further exposure.

## Section 4. First aid measures

- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. 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. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. 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

- Eye contact** : Causes serious eye damage.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes mild skin irritation. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur  
Local necrosis as evidenced by delayed onset of pain and tissue damage a few hours after injection.
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

### 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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

### Specific hazards arising from the chemical

- : In a fire or if heated, a pressure increase will occur and the container may burst. 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.

## Section 5. Fire-fighting measures

- Hazardous combustion products** : Aldehydes, hydrogen sulfide, Incomplete combustion products, Oxides of carbon, Smoke, Fume, sulfur oxides
- Special protective actions for fire-fighters** : Use standard firefighting procedures and consider the hazards of other involved materials. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Assure an extended cooling down period to prevent re-ignition. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. 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

### NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

### 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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not breathe vapor or mist.
- 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). Water polluting material. May be harmful to the environment if released in large quantities.

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. 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. 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. Confine the spill immediately with booms. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants. Warn other shipping. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Static Accumulator** : This material is a static accumulator. A liquid is typically considered a nonconductive, static accumulator if its conductivity is below 100 pS/m (100x10E-12 Siemens per meter) and is considered a semiconductive, static accumulator if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semiconductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, anti-static additives and filtration can greatly influence the conductivity of a liquid.
- 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. Store locked up. 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. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
solvent dewaxed residual oil (petroleum)	<p><b>NIOSH REL (United States, 10/2020) [OIL MIST MINERAL]</b>            TWA 10 hours: 5 mg/m<sup>3</sup>. Form: Mist.            STEL 15 minutes: 10 mg/m<sup>3</sup>. Form: Mist.</p> <p><b>OSHA PEL (United States, 5/2018) [Oil mist, mineral]</b>            TWA 8 hours: 5 mg/m<sup>3</sup>.</p> <p><b>ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined]</b>            TWA 8 hours: 5 mg/m<sup>3</sup>. Form: Inhalable fraction.</p>
molybdenum (iv) sulfide	<p><b>CAL OSHA PEL (United States, 5/2018) [molybdenum, insoluble compounds]</b>            TWA 8 hours: 3 mg/m<sup>3</sup> (as Mo). Form: respirable fraction.            TWA 8 hours: 10 mg/m<sup>3</sup> (as Mo). Form: total dust.</p> <p><b>OSHA PEL (United States, 5/2018) [Molybdenum Insoluble Compounds]</b>            TWA 8 hours: 15 mg/m<sup>3</sup> (as Mo). Form: Total dust.</p> <p><b>OSHA PEL 1989 (United States, 3/1989) [Molybdenum (as Mo) insoluble compounds]</b>            TWA 8 hours: 10 mg/m<sup>3</sup> (as Mo). Form: Total dust.</p> <p><b>ACGIH TLV (United States, 1/2024) [Molybdenum, Metal and insoluble compounds]</b>            TWA 8 hours: 10 mg/m<sup>3</sup> (as Mo). Form: Inhalable fraction.            TWA 8 hours: 3 mg/m<sup>3</sup> (as Mo). Form: Respirable fraction.</p>

## Section 8. Exposure controls/personal protection

zinc dialkyl dithiophosphate benzenamine, n-phenyl-, reaction products with 2,4,4-trimethylpentene naphthenic acids, zinc salts hydrotreated middle distillate (petroleum)	None. None. None. <b>NIOSH REL (United States, 10/2020) [OIL MIST MINERAL]</b> TWA 10 hours: 5 mg/m <sup>3</sup> . Form: Mist. STEL 15 minutes: 10 mg/m <sup>3</sup> . Form: Mist.
severely hydrotreated heavy paraffinic distillate	<b>NIOSH REL (United States, 10/2020) [OIL MIST MINERAL]</b> TWA 10 hours: 5 mg/m <sup>3</sup> . Form: Mist. STEL 15 minutes: 10 mg/m <sup>3</sup> . Form: Mist. <b>OSHA PEL (United States, 5/2018) [Oil mist, mineral]</b> TWA 8 hours: 5 mg/m <sup>3</sup> . <b>ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined]</b> TWA 8 hours: 5 mg/m <sup>3</sup> . Form: Inhalable fraction.
severely hydrotreated heavy paraffinic distillate	<b>NIOSH REL (United States, 10/2020) [OIL MIST MINERAL]</b> TWA 10 hours: 5 mg/m <sup>3</sup> . Form: Mist. STEL 15 minutes: 10 mg/m <sup>3</sup> . Form: Mist. <b>OSHA PEL (United States, 5/2018) [Oil mist, mineral]</b> TWA 8 hours: 5 mg/m <sup>3</sup> . <b>ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined]</b> TWA 8 hours: 5 mg/m <sup>3</sup> . Form: Inhalable fraction.
amines, c12-14-tert-alkyl hydrogen sulfide	None. <b>[Air contaminant - Decomposition product(s)]</b> <b>NIOSH REL (United States, 10/2020)</b> CEIL 10 minutes: 10 ppm. CEIL 10 minutes: 15 mg/m <sup>3</sup> . <b>OSHA PEL Z2 (United States, 2/2013)</b> CEIL: 20 ppm. AMP 10 minutes: 50 ppm. <b>CAL OSHA PEL (United States, 5/2018)</b> STEL 15 minutes: 21 mg/m <sup>3</sup> . STEL 15 minutes: 15 ppm. C: 50 ppm. TWA 8 hours: 14 mg/m <sup>3</sup> . TWA 8 hours: 10 ppm. <b>OSHA PEL 1989 (United States, 3/1989)</b> TWA 8 hours: 10 ppm. TWA 8 hours: 14 mg/m <sup>3</sup> . STEL 15 minutes: 15 ppm. STEL 15 minutes: 21 mg/m <sup>3</sup> . <b>ACGIH TLV (United States, 1/2024)</b> TWA 8 hours: 1 ppm. STEL 15 minutes: 5 ppm. <b>ExxonMobil (COMPANY)</b> STEL 15 minutes: 10 ppm. STEL 15 minutes: 14 mg/m <sup>3</sup> . TWA 8 hours: 5 ppm. TWA 8 hours: 7 mg/m <sup>3</sup> .

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

### Appropriate engineering controls

- : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### 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, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## Section 8. Exposure controls/personal protection

### 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. Contaminated work clothing should not be allowed out of the workplace. 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: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
- 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** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties and safety characteristics

**Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.**

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

- Physical state** : Liquid.
- Color** : Black
- Odor** : Characteristic
- Odor threshold** : Not available.
- pH** : Not applicable.
- Melting point/freezing point** : Not available.
- Boiling point or initial boiling point and boiling range** : Not available.
- Flash point** : Open cup: >200°C (>392°F) [ASTM D-92]
- Evaporation rate** : Not available.
- Flammability** : Ignitable
- Lower and upper explosion limit/flammability limit** : Not available.
- Vapor pressure** : Not available.
- Relative vapor density** : >2 [Air = 1]
- Relative density** : 0.99

## Section 9. Physical and chemical properties and safety characteristics

<b>Solubility in water</b>	: Negligible
<b>Partition coefficient: n-octanol/water</b>	: Not applicable.
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Not available.
<b><u>Particle characteristics</u></b>	
<b>Median particle size</b>	: Not applicable.
<b>DMSO Extract (mineral oil only), IP-346</b>	: <3 % by weight

## Section 10. Stability and reactivity

<b>Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: High energy sources of ignition. Excessive heat.
<b>Incompatible materials</b>	: Strong oxidizers
<b>Hazardous decomposition products</b>	: hydrogen sulfide

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Test	Species	Result	Duration
amines, c12-14-tert-alkyl	LC50 Inhalation Vapor	Rat	1.19 mg/l	4 hours
	LD50 Dermal	Rat	251 mg/kg	-
	LD50 Oral	Rat	612 mg/kg	-

#### Conclusion/Summary

<b>Inhalation</b>	: Minimally Toxic. No end point data for material. Based on assessment of the components.
<b>Dermal</b>	: Minimally Toxic. No end point data for material. Based on assessment of the components.
<b>Oral</b>	: Minimally Toxic. No end point data for material. Based on assessment of the components.

#### Irritation/Corrosion

#### Conclusion/Summary

<b>Skin</b>	: Mildly irritating to skin with prolonged exposure. No end point data for material. Based on assessment of the components.
<b>Eyes</b>	: Severely irritating, and may seriously damage eye tissue. No end point data for material. Based on assessment of the components.
<b>Respiratory</b>	: Negligible hazard at ambient/normal handling temperatures. No end point data for material. Elevated temperatures or mechanical action may form vapors, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs.

#### Respiratory or skin sensitization

#### Conclusion/Summary

## Section 11. Toxicological information

**Skin** : May cause allergic skin reaction. No end point data for material. Based on assessment of the components.

**Respiratory** : Not expected to be a respiratory sensitizer. No end point data for material.

### Mutagenicity

**Conclusion/Summary** : Not expected to be a germ cell mutagen. No end point data for material. Based on assessment of the components.

### Carcinogenicity

**Conclusion/Summary** : Not expected to cause cancer. No end point data for material. Based on assessment of the components.

### Reproductive toxicity

**Conclusion/Summary** : May damage fertility. No end point data for material. Based on assessment of the components.

### Specific target organ toxicity (single exposure)

**Conclusion/Summary** : Not expected to cause organ damage from a single exposure. No end point data for material.

### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Target organs
XTREME/XHP MOLY ADD BLEND - RT003013	Not applicable.	-

**Conclusion/Summary** : Not expected to cause organ damage from prolonged or repeated exposure. No end point data for material. Based on assessment of the components.

### Aspiration hazard

**Conclusion/Summary** : Not expected to be an aspiration hazard. Based on physico-chemical properties of the material. No end point data for material.

### Other information

**Contains** : Middle distillates: Carcinogenic in animal tests. Lifetime skin painting tests produced tumors, but the mechanism is due to repeated cycles of skin damage and restorative hyperplasia. This mechanism is considered unlikely in humans where such prolonged skin irritation would not be tolerated. Did not cause mutations In Vitro. Inhalation of vapors did not result in reproductive or developmental effects in laboratory animals. Inhalation of high concentrations in animals resulted in respiratory tract irritation, lung changes and some reduction in lung function. Non-sensitizing in test animals. Base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346, Modified Ames test, and/or other screening tests. Dermal and inhalation studies showed minimal effects; lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation. Not sensitizing in test animals. Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (substituted DPA): Results from a supplier's extended one-generation dietary study with 10-week pre-mating administration of substituted DPA included decreased body weight and body weight gains in parental females during gestation and lactation, decreased number of implantation sites and decreased mean litter size. A representative formulation containing substituted DPA was tested in a rat oral gavage reproductive/developmental toxicity screening study (OECD TG 421) with a 10-week pre-mating administration period. Study results included decreased body weight and body weight gain starting in pre-mating and continuing through gestation and lactation in parental females, decreased number of implantation sites and decreasing trend in litter size. A 5 wt% classification threshold for the reproductive effects of substituted DPA was derived based on the NOAEL (50 mg/kg/day) and is consistent with the NOAEL in the supplier's study.

## Section 12. Ecological information

The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

### Toxicity

#### Conclusion/Summary

- Acute toxicity** : Harmful to aquatic life.  
**Chronic toxicity** : Harmful to aquatic life with long lasting effects.

#### Persistence and degradability

- Biodegradability** : Base oil component -- Expected to be inherently biodegradable

#### Bioaccumulative potential

#### Conclusion/Summary

- : Base oil component -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

#### Mobility in soil

#### Mobility

- : Base oil component -- Expected to partition to sediment and wastewater solids. Low solubility and floats and is expected to migrate from water to the land.

#### Other ecological information

#### 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. Incineration or landfill should only be considered when recycling is not feasible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.  
 Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

## Section 14. Transport information

	<b>DOT Classification</b>	<b>TDG Classification</b>	<b>IMDG</b>	<b>IATA</b>
<b>UN number</b>	Not regulated.	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	-	-	-	-
<b>Transport hazard class(es)</b>	-	-	-	-
<b>Label(s) / Marks</b>				
<b>Packing group</b>	-	-	-	-
<b>Environmental hazards</b>	No.	No.	No.	No.

#### Additional information

## Section 14. Transport 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.

**Transport in bulk according to IMO instruments** : Not applicable.

## Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 4(a) proposed test rules:** alkyl phosphonate; 1h-benzotriazole, methyl-  
**TSCA 8(a) PAIR:** bis(2-ethylhexyl) hydrogen phosphate; 2-ethylhexyl dihydrogen phosphate; diphenylamine; naphthalene  
**TSCA 8(a) CDR Exempt/Partial exemption:** At least one component is not listed.  
**Clean Water Act (CWA) 307:** zinc dialkyl dithiophosphate; naphthenic acids, zinc salts; zinc neodecanoate; naphthalene; phenol  
**Clean Water Act (CWA) 311:** phosphoric acid; naphthalene; phenol; propylene oxide

### TSCA 12(b) - Chemical export notification

Not applicable.

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : 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

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
phenol	<0.1	Yes.	500 / 10000	-	1000	-
propylene oxide	<0.1	Yes.	10000	1444.3	100	14.4
ethylene oxide	<0.1	Yes.	1000	-	10	-

**SARA 304 RQ** : 1743296762.5 lbs / 791456730.2 kg [211192675.2 gal / 799451242.6 L]

### SARA 311/312

**Classification** : SERIOUS EYE DAMAGE - Category 1  
 SKIN SENSITIZATION - Category 1  
 TOXIC TO REPRODUCTION - Category 2

### SARA 313

	Product name	CAS number	%
<b>Form R - Reporting requirements</b>	zinc dialkyl dithiophosphate naphthenic acids, zinc salts	68457-79-4 12001-85-3	≤10 ≤3
<b>Supplier notification</b>	zinc dialkyl dithiophosphate naphthenic acids, zinc salts	68457-79-4 12001-85-3	≤10 ≤3

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

## Section 15. Regulatory information

- Massachusetts** : The following components are listed: OIL MIST, MINERAL; MOLYBDENUM DISULFIDE; OIL MIST, MINERAL; OIL MIST, MINERAL; OIL MIST, MINERAL
- New York** : None of the components are listed.
- New Jersey** : The following components are listed: ZINC compounds; ZINC compounds; MINERAL OIL (UNTREATED and MILDLY TREATED)
- Pennsylvania** : The following components are listed: ZINC COMPOUNDS; ZINC COMPOUNDS
- Illinois** : None of the components are listed.

### Inventory list

- Australia inventory (AIC)** : All components are listed or exempted.
- Canada inventory (DSL-NDSL)** : All components are listed or exempted.
- China inventory (IECSC)** : All components are listed or exempted.
- Japan inventory (CSCL)** : All components are listed or exempted.
- Japan inventory (Industrial Safety and Health Act)** : All components are listed or exempted.
- New Zealand Inventory of Chemicals (NZIoC)** : All components are listed or exempted.
- Philippines inventory (PICCS)** : All components are listed or exempted.
- Korea inventory (KECI)** : All components are listed or exempted.
- Taiwan Chemical Substances Inventory (TCSI)** : All components are listed or exempted.
- United States inventory (TSCA 8b)** : All components are active or exempted.

## Section 16. Other information

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

Health	*	3
Flammability		1
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 and the associated label are not required on SDSs or products leaving a facility 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 trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

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



### Procedure used to derive the classification

Classification	Justification
SERIOUS EYE DAMAGE - Category 1	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
TOXIC TO REPRODUCTION - Category 2	Calculation method

### History

- Date of issue/Date of revision** : 16 August 2024

## Section 16. Other information

**Date of previous issue** : 16 July 2024

**Version** : 1.02

**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 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
N/A = Not available  
SGG = Segregation Group  
UN = United Nations

**References**

: Not available.

✔ Indicates information that has changed from previously issued version.

**Product code**

: STKNO50012

**Notice to reader**

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