

# SAFETY DATA SHEET

## Section 1. Identification

**GHS product identifier** : Mystik® JT-8® Synthetic Blend Super Heavy Duty Engine Oil, SAE 15W-50  
**Other means of identification** : Heavy duty motor oil  
**Product code** : 663004002

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

#### Identified uses

Heavy duty motor oil

**This product is not recommended for any use other than the identified uses above.**

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

**Emergency telephone number (with hours of operation)** : 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** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : TOXIC TO REPRODUCTION - Category 2  
AQUATIC HAZARD (LONG-TERM) - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 100%

### GHS label elements

#### Hazard pictograms



**Signal word** : Warning

**Hazard statements** : H361 - Suspected of damaging fertility or the unborn child.  
H411 - Toxic to aquatic life with long lasting effects.

### Precautionary statements

**General** : P102 - Keep out of reach of children.

**Prevention** : P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P280 - Wear protective gloves, protective clothing and eye or face protection.  
P273 - Avoid release to the environment.  
P262 - Do not get in eyes, on skin, or on clothing.

**Response** : P391 - Collect spillage.  
P308 + P313 - IF exposed or concerned: Get medical advice or attention.  
P352 - Wash with plenty of soap and water or use a recognized skin cleanser.

## Section 2. Hazards identification

- Storage** : P401 - Store in accordance with all local, regional, national and international regulations.  
P405 - Store locked up.  
P402 + P404 - Store in a dry place and a closed container.  
Empty containers may contain material residues which can ignite with explosive force. Misuse of empty containers can be dangerous if used to store toxic, flammable, or reactive materials. Cutting or welding of empty containers can cause fire, explosion, or release of toxic fumes from residues. Do not pressurize or expose empty containers to open flame, sparks, or heat. Keep container closed and drum bungs in place. All label warnings and precautions must be observed. Return empty drums to a qualified reconditioner. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling, or disposing of empty containers and/or waste residues of this material.
- Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. Don't Pollute. Conserve Resources. Return used oil to collection centers.
- Hazards not otherwise classified** : None known.
- Hazards identified when used** : No known significant effects or critical hazards.

## Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Heavy duty motor oil

| Ingredient name                                                               | %           | Identifiers      |
|-------------------------------------------------------------------------------|-------------|------------------|
| Distillates (petroleum), hydrotreated heavy paraffinic                        | ≥80         | CAS: 64742-54-7  |
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based          | ≥5 - ≤10    | CAS: 72623-87-1  |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based          | ≥1 - ≤5     | CAS: 72623-86-0  |
| Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)     | ≥1 - ≤5     | CAS: 9003-29-6   |
| Distillates (petroleum), solvent-dewaxed light paraffinic                     | ≥0.5 - ≤1.5 | CAS: 64742-56-9  |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic                     | ≥0.5 - ≤1.5 | CAS: 64742-65-0  |
| Paraffin oils (petroleum), catalytic dewaxed heavy                            | ≥0.5 - ≤1.5 | CAS: 64742-70-7  |
| Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts | ≥0.5 - ≤1.5 | CAS: 113706-15-3 |
| bis(nonylphenyl)amine                                                         | ≥0.1 - ≤1   | CAS: 36878-20-3  |
| Lead                                                                          | ≤0.1        | CAS: 7439-92-1   |

Any concentration shown as a range is to protect confidentiality or is due to process 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 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 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. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : 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. Get medical attention. 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** : 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 specific data.
- Inhalation** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

### 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 an extinguishing agent suitable for the surrounding fire.

**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 toxic 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 the following materials:  
carbon dioxide  
carbon monoxide

**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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

### 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. 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. 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.

## Section 7. Handling and storage

### Precautions for safe handling

## Section 7. Handling and storage

### Protective measures

- : Put on appropriate personal protective equipment (see Section 8). 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 ingest. Avoid breathing vapor or mist. 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.

### 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.

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

| Ingredient name                                                      | Exposure limits                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Distillates (petroleum), hydrotreated heavy paraffinic               | <b>ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined] A4.</b><br>TWA 8 hours: 5 mg/m <sup>3</sup> . Form: Inhalable fraction.<br><b>NIOSH REL (United States, 10/2020) [OIL MIST MINERAL]</b><br>TWA 10 hours: 5 mg/m <sup>3</sup> . Form: Mist.<br>STEL 15 minutes: 10 mg/m <sup>3</sup> . Form: Mist.<br><b>OSHA PEL (United States, 5/2018) [Oil mist, mineral]</b><br>TWA 8 hours: 5 mg/m <sup>3</sup> . |
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based | <b>ACGIH TLV (United States)</b><br>TWA: 5.<br><b>NIOSH REL (United States, 10/2020) [OIL MIST MINERAL]</b><br>TWA 10 hours: 5 mg/m <sup>3</sup> . Form: Mist.<br>STEL 15 minutes: 10 mg/m <sup>3</sup> . Form: Mist.<br><b>OSHA PEL (United States)</b><br>TWA: 5 mg/m <sup>3</sup> .                                                                                                                                                       |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based | <b>ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined] A4.</b><br>TWA 8 hours: 5 mg/m <sup>3</sup> . Form: Inhalable fraction.<br><b>NIOSH REL (United States, 10/2020) [OIL MIST MINERAL]</b><br>TWA 10 hours: 5 mg/m <sup>3</sup> . Form: Mist.<br>STEL 15 minutes: 10 mg/m <sup>3</sup> . Form: Mist.<br><b>OSHA PEL (United States, 5/2018) [Oil mist,</b>                                                |

## Section 8. Exposure controls/personal protection

Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)

Distillates (petroleum), solvent-dewaxed light paraffinic

Distillates (petroleum), solvent-dewaxed heavy paraffinic

Paraffin oils (petroleum), catalytic dewaxed heavy

Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts  
bis(nonylphenyl)amine  
Lead

**mineral]**

TWA 8 hours: 5 mg/m<sup>3</sup>.

None.

**ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined] A4.**

TWA 8 hours: 5 mg/m<sup>3</sup>. Form: Inhalable fraction.

**NIOSH REL (United States, 10/2020) [OIL MIST MINERAL]**

TWA 10 hours: 5 mg/m<sup>3</sup>. Form: Mist.

STEL 15 minutes: 10 mg/m<sup>3</sup>. Form: Mist.

**OSHA PEL (United States, 5/2018) [Oil mist, mineral]**

TWA 8 hours: 5 mg/m<sup>3</sup>.

**ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined] A4.**

TWA 8 hours: 5 mg/m<sup>3</sup>. Form: Inhalable fraction.

**NIOSH REL (United States, 10/2020) [OIL MIST MINERAL]**

TWA 10 hours: 5 mg/m<sup>3</sup>. Form: Mist.

STEL 15 minutes: 10 mg/m<sup>3</sup>. Form: Mist.

**OSHA PEL (United States, 5/2018) [Oil mist, mineral]**

TWA 8 hours: 5 mg/m<sup>3</sup>.

**ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined] A4.**

TWA 8 hours: 5 mg/m<sup>3</sup>. Form: Inhalable fraction.

**NIOSH REL (United States, 10/2020) [OIL MIST MINERAL]**

TWA 10 hours: 5 mg/m<sup>3</sup>. Form: Mist.

STEL 15 minutes: 10 mg/m<sup>3</sup>. Form: Mist.

**OSHA PEL (United States, 5/2018) [Oil mist, mineral]**

TWA 8 hours: 5 mg/m<sup>3</sup>.

None.

None.

**ACGIH TLV (United States, 1/2024) [Lead and inorganic compounds] A3.**

TWA 8 hours: 0.05 mg/m<sup>3</sup> (as Pb).

**NIOSH REL (United States, 10/2020)**

TWA 8 hours: 0.05 mg/m<sup>3</sup>.

**OSHA PEL (United States, 5/2018) [Lead inorganic]**

TWA 8 hours: 50 µg/m<sup>3</sup> (as Pb).

### Biological exposure indices

| Ingredient name | Exposure indices                                                                                                                        |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Lead            | <b>ACGIH BEI (United States, 1/2024) [lead and inorganic compounds]</b><br>BEI: 200 µg/l, lead [in blood]. Sampling time: not critical. |

### 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.

## Section 8. Exposure controls/personal protection

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Environmental exposure controls</b> | : 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.                                                                                                                                                                                                                                                                   |
| <b>Individual protection measures</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Hygiene measures</b>                | : 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.                                                                                                                                                                                                    |
| <b>Eye/face protection</b>             | : 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.                                                                                                                                                                                                                                    |
| <b>Skin protection</b>                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Hand protection</b>                 | : 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. 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. |
| <b>Body protection</b>                 | : 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.                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Other skin protection</b>           | : 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.                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Respiratory protection</b>          | : 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

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

### Appearance

|                                                                 |                                          |
|-----------------------------------------------------------------|------------------------------------------|
| <b>Physical state</b>                                           | : Liquid.                                |
| <b>Color</b>                                                    | : Amber.                                 |
| <b>Odor</b>                                                     | : Mild petroleum odor                    |
| <b>pH</b>                                                       | : Not available.                         |
| <b>Boiling point or initial boiling point and boiling range</b> | : Not available.                         |
| <b>Flash point</b>                                              | : Open cup: 234°C (453.2°F) [Cleveland.] |
| <b>Evaporation rate</b>                                         | : <1 (n-butyl acetate. = 1)              |
| <b>Lower and upper explosive (flammable) limits</b>             | : Not available.                         |
| <b>Vapor pressure</b>                                           | : <0.013 kPa (<0.1 mm Hg)                |
| <b>Relative vapor density</b>                                   | : >1 [Air = 1]                           |
| <b>Relative density</b>                                         | : 0.88                                   |
| <b>Density lbs/gal</b>                                          | : Estimated 7.34 lbs/gal                 |
| <b>Density gm/cm<sup>3</sup></b>                                | : Not available.                         |
| <b>Gravity, °API</b>                                            | : Estimated 29 @ 60 F                    |

**Solubility(ies) :**

| Media      | Result      |
|------------|-------------|
| cold water | Not soluble |

**Auto-ignition temperature** : Not available.

**Viscosity** : Dynamic (room temperature): Not available.  
 Kinematic (room temperature): Not available.  
 Kinematic (40°C (104°F)): 151 mm²/s (151 cSt)

**Viscosity SUS** : Estimated 699 SUS @104 F**Flow time (ISO 2431)** : Not available.**Particle characteristics****Median particle size** : Not applicable.**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** : 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****Product/ingredient name****Result**

Distillates (petroleum), hydrotreated heavy paraffinic

**Rat - Dermal - LD50**  
 >5000 mg/kg  
 EU

**Rat - Oral - LD50**  
 >5000 mg/kg  
 EU

Distillates (petroleum), solvent-dewaxed light paraffinic

**Rabbit - Dermal - LD50**  
 >5000 mg/kg

**Rat - Oral - LD50**  
 >5000 mg/kg

Distillates (petroleum), solvent-dewaxed heavy paraffinic

**Rabbit - Dermal - LD50**  
 >5000 mg/kg

**Rat - Oral - LD50**  
 >5000 mg/kg

**Conclusion/Summary [Product]** :**Ingredient name****Conclusion/Summary**

## Section 11. Toxicological information

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.

Distillates (petroleum), solvent-dewaxed light 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. In long term studies (up to two years) no carcinogenic effects have been reported in any animal species tested.

Distillates (petroleum), solvent-dewaxed 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.

Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isoctyl) esters, zinc salts

This material is an eye irritant.

### Skin corrosion/irritation

Not available.

**Conclusion/Summary [Product]** : No additional information.

### Serious eye damage/eye irritation

Not available.

**Conclusion/Summary [Product]** : No additional information.

### Respiratory corrosion/irritation

Not available.

**Conclusion/Summary [Product]** : No additional information.

### Respiratory or skin sensitization

Not available.

### **Skin**

**Conclusion/Summary [Product]** : No additional information.

### **Respiratory**

**Conclusion/Summary [Product]** : No additional information.

## Section 11. Toxicological information

### Germ cell mutagenicity

Not available.

**Conclusion/Summary [Product]** : No additional information.

### Carcinogenicity

Not available.

**Conclusion/Summary [Product]** : No additional information.

### Classification

| Product/ingredient name | OSHA | IARC | NTP                                              |
|-------------------------|------|------|--------------------------------------------------|
| Lead                    | -    | 2B   | Reasonably anticipated to be a human carcinogen. |

### Reproductive toxicity

Not available.

**Conclusion/Summary [Product]** : No additional information.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Result                                                                                                                                                                                                                      |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lead                    | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous system (CNS), peripheral nervous system) - Category 1<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system, kidneys) (oral) - Category 2 |

### Aspiration hazard

| Product/ingredient name                                                   | Result                         |
|---------------------------------------------------------------------------|--------------------------------|
| Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene) | ASPIRATION HAZARD - Category 1 |
| Distillates (petroleum), solvent-dewaxed light paraffinic                 | ASPIRATION HAZARD - Category 1 |

**Information on the likely routes of exposure** : Routes of entry anticipated: Dermal.

### Potential acute health effects

|                     |                                                     |
|---------------------|-----------------------------------------------------|
| <b>Eye contact</b>  | : No known significant effects or critical hazards. |
| <b>Inhalation</b>   | : No known significant effects or critical hazards. |
| <b>Skin contact</b> | : No known significant effects or critical hazards. |
| <b>Ingestion</b>    | : No known significant effects or critical hazards. |

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.

## Section 11. Toxicological information

- Inhalation** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

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

#### Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

- Conclusion/Summary [Product]** : Not available.

- General** : No known significant effects or critical hazards.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : Suspected of damaging fertility or the unborn child.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : Suspected of damaging fertility.

### Numerical measures of toxicity

#### Acute toxicity estimates

| Product/ingredient name                                                       | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|-------------------------------------------------------------------------------|--------------|----------------|--------------------------|----------------------------|-------------------------------------|
| Mystik® JT-8® Synthetic Blend Super Heavy Duty Engine Oil, SAE 15W-50         | 312340.1     | N/A            | N/A                      | N/A                        | N/A                                 |
| Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts | 2500         | N/A            | N/A                      | N/A                        | N/A                                 |

## Section 12. Ecological information

### Toxicity

#### Product/ingredient name

Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)

#### Result

##### EC50

Daphnia

>1000 mg/l - similar material [48 hours]

##### LC50

Fish

>1000 mg/l - similar material [96 hours]

##### Acute - LC50 - Fresh water

Crustaceans - Water flea - *Ceriodaphnia reticulata*

Age: <4 hours

530 µg/l [48 hours]

Effect: Mortality

##### Acute - LC50 - Fresh water

Fish - common carp - *Cyprinus carpio* - Juvenile (Fledgling, Hatchling, Weanling)

Size: 3.5 cm

0.44 ppm [96 hours]

Effect: Mortality

##### Chronic - NOEC - Fresh water

Fish - common carp - *Cyprinus carpio*

Age: 13 months; Size: 10.5 cm; Weight: 27.8 g

0.03 µg/l [4 weeks]

Effect: Accumulation

##### Acute - EC50 - Fresh water

OECD

Algae - Green algae - *Raphidocelis subcapitata* - Exponential growth phase

20.5 µg/l [72 hours]

Effect: Population

##### Chronic - EC10 - Fresh water

OECD

Algae - Green algae - *Raphidocelis subcapitata* - Exponential growth phase

3.9 µg/l [72 hours]

Effect: Population

Lead

**Conclusion/Summary [Product]** : Not available.

### Persistence and degradability

Not available.

**Conclusion/Summary [Product]** : **Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene):** This product is unlikely to biodegrade at a significant rate.

#### Ingredient name

Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)

#### Conclusion/Summary

This product is unlikely to biodegrade at a significant rate.

### Bioaccumulative potential

## Section 12. Ecological information

| Product/ingredient name                                                          | LogP <sub>ow</sub> | BCF                                                                             | Potential |
|----------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------------|-----------|
| Butene, homopolymer<br>(products derived from either/<br>or But-1-ene/But-2-ene) | 7.6 to 7.8         | 314 to 1882                                                                     | High      |
| bis(nonylphenyl)amine                                                            | 3.64 to 7.02       | 1730 [METI guideline<br>(concentration test on<br>chemical substances in fish)] | High      |

### Mobility in soil

**Soil/Water partition coefficient** : 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. 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 emptied 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.

**RCRA classification** : D018

## Section 14. Transport information

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

**Oil:** The product(s) represented by this SDS is (are) regulated as “oil” under 49 CFR Part 130. Shipments by rail or highway in packaging having a capacity of 3500 gallons or more or in a quantity greater 42,000 gallons are subject to these requirements. In addition, mixtures containing 10% or more of this product may be subject to these requirements.

**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 14. Transport information

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

## Section 15. Regulatory information

### U.S. Federal regulations

**TSCA 4(a) final test rules:** 2-Butenedioic acid (E)-, di-C8-18-alkyl esters

**TSCA 5(e) substance consent order:** cyclohexane

**TSCA 8(a) PAIR:** phenol, (tetrapropenyl) derivatives; 2-Butenedioic acid (E)-, di-C8-18-alkyl esters; diphenylamine; toluene; cyclohexane

**TSCA 8(a) CDR Exempt/Partial exemption:** Not determined

**Clean Water Act (CWA) 307:** Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts; toluene; benzene; lead powder; Nickel

**Clean Water Act (CWA) 311:** fumaric acid; ethylenediamine; toluene; benzene; cyclohexane; vinyl acetate

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.

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

Not applicable.

**Clean Air Act Section 112** : Listed

**(b) Hazardous Air Pollutants (HAPs)**

**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) |
| ethylenediamine | ≤0.1 | Yes. | 10000        | 1337.1    | 5000        | 668.5     |
| vinyl acetate   | ≤0.1 | Yes. | 1000         | 129       | 5000        | 644.8     |

**SARA 304 RQ** : 31005060 lbs / 14076297.3 kg [4225641.3 gal / 15995792.3 L]

### SARA 311/312

**Classification** : TOXIC TO REPRODUCTION - Category 2

#### Composition/information on ingredients

| Name                                                                           | %           | Classification                                                  |
|--------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------|
| Butene, homopolymer (products derived from either/or But-1-ene/ But-2-ene)     | ≥1 - ≤5     | SKIN IRRITATION - Category 2<br>ASPIRATION HAZARD - Category 1  |
| Distillates (petroleum), solvent-dewaxed light paraffinic                      | ≥0.5 - ≤1.5 | ASPIRATION HAZARD - Category 1                                  |
| Phosphorodithioic acid, mixed O, O-bis(sec-Bu and isooctyl) esters, zinc salts | ≥0.5 - ≤1.5 | SKIN IRRITATION - Category 2<br>SERIOUS EYE DAMAGE - Category 1 |
| bis(nonylphenyl)amine                                                          | ≥0.1 - ≤1   | TOXIC TO REPRODUCTION - Category 2                              |

## Section 15. Regulatory information

### SARA 313

|                                 | Product name                                                                  | CAS number  | %           |
|---------------------------------|-------------------------------------------------------------------------------|-------------|-------------|
| Form R - Reporting requirements | Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts | 113706-15-3 | ≥0.5 - ≤1.5 |
|                                 | lead powder                                                                   | 7439-92-1   | ≤0.1        |
| Supplier notification           | Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts | 113706-15-3 | ≥0.5 - ≤1.5 |
|                                 | lead powder                                                                   | 7439-92-1   | ≤0.1        |

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

#### Massachusetts

: The following components are listed: OIL MIST, MINERAL; OIL MIST, MINERAL; OIL MIST, MINERAL; OIL MIST, MINERAL; MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED LIGHT PARAFFINIC; OIL MIST, MINERAL; MINERAL OIL, PETROLEUM PARAFFIN OILS, CATALYTIC DEWAXED HEAVY

#### New York

: The following components are listed: Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)

#### New Jersey

: The following components are listed: MINERAL OIL (UNTREATED and MILDLY TREATED); ZINC compounds

#### Pennsylvania

: The following components are listed: Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene); ZINC COMPOUNDS

### California Prop. 65

**⚠ WARNING:** This product can expose you to chemicals including Benzene, which is known to the State of California to cause cancer, and Ethylene Glycol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

| Ingredient name     | Concentration | Cancer | Reproductive | No significant risk level | Maximum acceptable dosage level |
|---------------------|---------------|--------|--------------|---------------------------|---------------------------------|
| Ethylene Glycol     | <0.1          | No.    | Yes.         | -                         | Yes.                            |
| Toluene             | <0.1          | No.    | Yes.         | -                         | Yes.                            |
| Benzene             | <0.1          | Yes.   | Yes.         | Yes.                      | Yes.                            |
| Lead                | <0.1          | Yes.   | Yes.         | Yes.                      | Yes.                            |
| Nickel              | <0.0001       | Yes.   | No.          | -                         | -                               |
| Cobalt metal powder | <0.0001       | Yes.   | No.          | -                         | -                               |
| vinyl acetate       | <0.0001       | Yes.   | No.          | -                         | -                               |

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

#### Australia

: Not determined.

#### Canada

: All components are listed or exempted.

#### China

: Not determined.

## Section 15. Regulatory information

|                                |                                                                                      |
|--------------------------------|--------------------------------------------------------------------------------------|
| <b>Eurasian Economic Union</b> | : Russian Federation inventory: Not determined.                                      |
| <b>Japan</b>                   | : Japan inventory (CSCL): Not determined.<br>Japan inventory (ISHL): Not determined. |
| <b>New Zealand</b>             | : Not determined.                                                                    |
| <b>Philippines</b>             | : Not determined.                                                                    |
| <b>Republic of Korea</b>       | : Not determined.                                                                    |
| <b>Taiwan</b>                  | : Not determined.                                                                    |
| <b>Thailand</b>                | : Not determined.                                                                    |
| <b>Turkey</b>                  | : Not determined.                                                                    |
| <b>United States</b>           | : All components are active or exempted.                                             |
| <b>Viet Nam</b>                | : Not determined.                                                                    |

## Section 16. Other information

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



### Procedure used to derive the classification

| Classification                          | Justification      |
|-----------------------------------------|--------------------|
| TOXIC TO REPRODUCTION - Category 2      | Calculation method |
| AQUATIC HAZARD (LONG-TERM) - Category 2 | Calculation method |

### History

|                                       |             |
|---------------------------------------|-------------|
| <b>Date of printing</b>               | : 5/1/2026  |
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|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Key to abbreviations</b> | : ATE = Acute Toxicity Estimate<br>BCF = Bioconcentration Factor<br>DOT = Department of Transportation<br>GHS = Globally Harmonized System of Classification and Labelling of Chemicals<br>IATA = International Air Transport Association<br>IBC = Intermediate Bulk Container<br>IMDG = International Maritime Dangerous Goods<br>IMO = International Maritime Organization<br>LogPow = logarithm of the octanol/water partition coefficient<br>MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)<br>N/A = Not available<br>SGG = Segregation Group<br>TDG = Transportation of Dangerous Goods<br>UN = United Nations |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                   |                  |
|-------------------|------------------|
| <b>References</b> | : Not available. |
|-------------------|------------------|

Indicates information that has changed from previously issued version.

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## Section 16. Other information

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