



# SAFETY DATA SHEET

According to the Hazard Communication Standard, 29 CFR 1910.1200

## RUBIA WORKS 5000 10W-40

SDS #: C3AILC10S

### Section 1. Identification

**GHS product identifier** : RUBIA WORKS 5000 10W-40

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

##### Identified uses

Motor oil

**Supplier's details** : TotalEnergies Marketing USA, Inc.  
1201 Louisiana St. Suite 1800  
Houston, TX 77002  
Phone: 713-483-5000  
ProductSafety@totalenergies.com

**Emergency telephone number (with hours of operation)** :

1-866-928-0789 (For Emergencies, call CARECHEM 24/7 Domestic)  
1-215-207-0061 (For Emergencies, call CARECHEM 24/7 International)

### Section 2. Hazards identification

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

**Classification of the substance or mixture** : Not classified.

#### GHS label elements

**Signal word** : No signal word.

**Hazard statements** :  No hazard statement.

#### Precautionary statements

**Prevention** : Not applicable.

**Response** : Not applicable.

**Storage** : Not applicable.

**Disposal** : Not applicable.

**Hazards not otherwise classified** : None known.

### Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

Ingredient name	% (w/w)	Identifiers	GHS Classification
Distillates (petroleum), hydrotreated heavy paraffinic	≤3	CAS: 64742-54-7	ASPIRATION HAZARD - Category 1
Distillates (petroleum), solvent-dewaxed heavy paraffinic	≤3	CAS: 64742-65-0	ASPIRATION HAZARD - Category 1
Distillates (petroleum), solvent-dewaxed light paraffinic	≤3	CAS: 64742-56-9	ASPIRATION HAZARD - Category 1
Paraffin oils (petroleum), catalytic dewaxed heavy	≤3	CAS: 64742-70-7	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light paraffinic	≤3	CAS: 64742-55-8	ASPIRATION HAZARD - Category 1
Distillates (petroleum), solvent-refined light paraffinic	≤3	CAS: 64741-89-5	ASPIRATION HAZARD - Category 1
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)	≤3	CAS: 113706-15-3	SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1

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

**Additional information** : Mineral oil of petroleum origin. Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

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

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

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- Skin contact** : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Defatting to the skin. May cause skin dryness and irritation.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.

- Skin contact** : Adverse symptoms may include the following:  
irritation  
dryness  
cracking
- Ingestion** : No specific data.

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### 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.

- Hazardous thermal decomposition products** : ☒ Carbon monoxide  
carbon dioxide  
Silicon Dioxide  
nitrogen oxides  
phosphorus oxides  
sulfur oxides  
Hydrogen sulfide  
Mercaptans  
Zinc oxides

- 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.

- Remark** : ☒ Non-flammable.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

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

## Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. 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. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. 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. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

### Precautions for safe handling

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

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

## Section 8. Exposure controls/personal protection

### Control parameters

### Occupational exposure limits

Product/substance	Exposure limits
Distillates (petroleum), hydrotreated heavy paraffinic	<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, 7/2023) [Mineral Oil, pure, highly and severely refined] A4.</b>  TWA 8 hours: 5 mg/m<sup>3</sup>. Form: Inhalable fraction.</p>
Distillates (petroleum), solvent-dewaxed heavy paraffinic	<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, 7/2023) [Mineral Oil, pure, highly and severely refined] A4.</b>  TWA 8 hours: 5 mg/m<sup>3</sup>. Form: Inhalable fraction.</p>
Distillates (petroleum), solvent-dewaxed light paraffinic	<p><b>NIOSH REL (United States, 10/2020) [OIL MIST MINERAL]</b>  TWA 10 hours: 5 mg/m<sup>3</sup>. Form: Mist.</p>

Paraffin oils (petroleum), catalytic dewaxed heavy	<p>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, 7/2023) [Mineral Oil, pure, highly and severely refined] A4.</b>  TWA 8 hours: 5 mg/m<sup>3</sup>. Form: Inhalable fraction.  <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, 7/2023) [Mineral Oil, pure, highly and severely refined] A4.</b>  TWA 8 hours: 5 mg/m<sup>3</sup>. Form: Inhalable fraction.  <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, 7/2023) [Mineral Oil, pure, highly and severely refined] A4.</b>  TWA 8 hours: 5 mg/m<sup>3</sup>. Form: Inhalable fraction.  <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, 7/2023) [Mineral Oil, pure, highly and severely refined] A4.</b>  TWA 8 hours: 5 mg/m<sup>3</sup>. Form: Inhalable fraction.  <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, 7/2023) [Mineral Oil, pure, highly and severely refined] A4.</b>  TWA 8 hours: 5 mg/m<sup>3</sup>. Form: Inhalable fraction.  None.</p>
Distillates (petroleum), hydrotreated light paraffinic	
Distillates (petroleum), solvent-refined light paraffinic	
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis (dithiophosphate)	

## Biological exposure indices

No exposure indices known.

## Advisory OEL

: Mineral oil mist: USA: OSHA (PEL) TWA 5 mg/m<sup>3</sup>, NIOSH (REL) TWA 5 mg/m<sup>3</sup>, STEL 10 mg/m<sup>3</sup>, ACGIH (TLV) TWA 5 mg/m<sup>3</sup> (highly refined)

## Appropriate engineering controls

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

## Environmental exposure controls

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

## Individual protection measures

### Hygiene measures

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

### Eye/face protection

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

## Skin protection

### Hand protection

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

Hydrocarbon-proof gloves

Fluorinated rubber

nitrile rubber

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

### 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.

### Respiratory protection

: None under normal use conditions. If these are not sufficient to maintain exposure below the OEL, suitable respiratory protection must be worn.

## Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature (20°C / 68°F) and pressure (1013 hPa) unless otherwise indicated

### Appearance

#### Physical state

: Liquid.

#### Color

: ☒ Brown.

#### Odor

: Characteristic.

#### Odor threshold

: Not available.

#### pH

: Not applicable.

#### Melting point/freezing point

: Technically not possible to measure

#### Pour point

: ☒ -33°C (-27.4°F)

#### Boiling point

: >316°C (>600.8°F) [ISO 3405]

#### Flash point

: ☒ Open cup: 238°C (460.4°F) [Cleveland Open Cup (COC)]

#### Evaporation rate

: Not available.

#### Flammability (solid, gas)

: ☒ Non-flammable.

#### Lower and upper explosive (flammable) limits

: ☒ Lower: 0.9% [ASTM E 681]  
Upper: ≤13% [ASTM E 681]

#### Vapor pressure

: ☒ >0.01 kPa (>0.075 mm Hg) [room temperature]  
Not applicable. [50°C]

#### Vapor density

: >2 [Air = 1]

#### Relative density

: ☒ 0.866 [ISO 12185]

#### Density

: ☒ 0.866 g/cm<sup>3</sup> [15°C] [ISO 3675]

#### Solubility(ies)

:

Media	Result
water	Not soluble

#### Miscible with water

: No.

#### Partition coefficient: n-octanol/water

: Not applicable.

#### Auto-ignition temperature

: ☒ 238°C (>460.4°F) [ASTM E 659]

#### Decomposition temperature

: Not applicable.



- Viscosity** : ☒ Dynamic (room temperature): Not available.  
Kinematic (room temperature): Not available.  
Kinematic (40°C (104°F)): 103 mm<sup>2</sup>/s (103 cSt) [ISO 3104]
- 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** : Stable under recommended storage and handling conditions (see Section 7).
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Incompatible materials** : Strong oxidizing agents
- 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/substance	Result	Species	Dose	Exposure	Test
<input checked="" type="checkbox"/> Distillates (petroleum), hydrotreated heavy paraffinic	LC50 Inhalation Dusts and mists	Rat - Male, Female	>5 mg/l	4 hours	OECD 403
	LD50 Dermal	Rabbit - Male, Female	>5000 mg/kg	-	Read across OECD 402
	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-	Read across OECD 401
Distillates (petroleum), solvent-dewaxed heavy paraffinic	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours	Read across OECD 403
	LD50 Dermal	Rabbit	>5000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 420
Distillates (petroleum), solvent-dewaxed light paraffinic	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours	OECD 403
	LD50 Dermal	Rabbit	>5000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 401
Paraffin oils (petroleum), catalytic dewaxed heavy	LC50 Inhalation Dusts and mists	Rat	5.1 mg/l	4 hours	-
	LC50 Inhalation Vapor	Rat	80.4 mg/l	1 hours	-
	LC50 Inhalation Vapor	Rat	20.1 mg/l	4 hours	-
	LD50 Dermal	Rabbit	>5000 mg/kg	-	-
	LD50 Oral	Rat	>5000 mg/kg	-	-
Distillates (petroleum), hydrotreated light paraffinic	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours	OECD 403
	LD50 Dermal	Rabbit	>5000 mg/kg	-	OECD 402

Distillates (petroleum), solvent-refined light paraffinic  zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis (dithiophosphate)	LD50 Oral	Rat	>5000 mg/kg	-	OECD 420
	LC50 Inhalation Dusts and mists	Rat	5.1 mg/l	4 hours	OECD 403
	LD50 Dermal	Rabbit	>5000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 420
	LC50 Inhalation Dusts and mists	Rat - Male	>2 mg/l	1 hours	OECD 403
	LD50 Dermal	Rabbit - Male, Female	>3160 mg/kg	-	OECD 402
	LD50 Oral	Rat - Male	2600 mg/kg	-	-

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

## Irritation/Corrosion

Product/substance	Result	Species	Score	Exposure	Test
Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis (dithiophosphate)	Eyes - Irritant	Rabbit	-	-	-
	Skin - Irritant	Rabbit	-	4 hours	OECD 404

## Conclusion/Summary

**Skin** : Based on available data, the classification criteria are not met.

**Eyes** : Based on available data, the classification criteria are not met.

**Respiratory** : Based on available data, the classification criteria are not met.

## Sensitization

## Conclusion/Summary

**Skin** : Based on available data, the classification criteria are not met. The supplier of one or more of the components contained within this formulation has indicated that he has data on the components and/or similar mixtures, which confirms that at the concentration used, skin corrosion classification is not required. Contains sensitizer. May produce an allergic reaction.

**Respiratory** : Based on available data, the classification criteria are not met.

## Mutagenicity

Product/substance	Test	Experiment	Result
Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis (dithiophosphate)	OECD 471	Experiment: In vitro Subject: Bacteria	Negative
	OECD 474	Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic	Negative

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

## Carcinogenicity

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

## Reproductive toxicity

Product/substance	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis (dithiophosphate)	Negative	Negative	Negative	Rat - Male, Female	Oral	-

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

## Teratogenicity



Product/substance	Result	Species	Dose	Exposure
Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis (dithiophosphate)	Negative - Oral	Rat - Male, Female	-	-

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Specific target organ toxicity (single exposure)**

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Specific target organ toxicity (repeated exposure)**

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Aspiration hazard**

Name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	ASPIRATION HAZARD - Category 1
Distillates (petroleum), solvent-dewaxed heavy paraffinic	ASPIRATION HAZARD - Category 1
Distillates (petroleum), solvent-dewaxed light paraffinic	ASPIRATION HAZARD - Category 1
Paraffin oils (petroleum), catalytic dewaxed heavy	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light paraffinic	ASPIRATION HAZARD - Category 1
Distillates (petroleum), solvent-refined light paraffinic	ASPIRATION HAZARD - Category 1

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Information on the likely routes of exposure** : Not available.

**Potential acute health effects**

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Defatting to the skin. May cause skin dryness and irritation.  
**Ingestion** : No known significant effects or critical hazards.

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

**Eye contact** : No specific data.  
**Inhalation** : No specific data.  
**Skin contact** : Adverse symptoms may include the following:  
irritation  
dryness  
cracking  
**Ingestion** : No specific data.

**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**

Product/substance	Result	Species	Dose	Exposure
Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis (dithiophosphate)	Sub-chronic LOAEL Dermal	Rabbit - Male, Female	70 mg/kg	-
	Sub-chronic NOAEL Oral	Rat - Male, Female	160 mg/kg	-

<b>General</b>	: No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: No known significant effects or critical hazards.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Reproductive toxicity</b>	: No known significant effects or critical hazards.

## Numerical measures of toxicity

### Acute toxicity estimates

Product/substance	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
RUBIA WORKS 5000 10W-40 Paraffin oils (petroleum), catalytic dewaxed heavy Distillates (petroleum), solvent-refined light paraffinic zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis (dithiophosphate)	245098.0	235671.2	N/A	N/A	N/A
	N/A	N/A	N/A	20.1	5.1
	N/A	N/A	N/A	N/A	5.1
	2600	2500	N/A	N/A	N/A

### Other information

:  
Not available.

## Section 12. Ecological information

### Toxicity

Product/substance	Result	Species	Exposure	Test
Distillates (petroleum), hydrotreated heavy paraffinic	Acute EC50 >100 mg/l	Algae - <i>Pseudokirchneriella subcapitata</i>	72 hours	OECD 201
	Acute EC50 >10000 mg/l	Crustaceans - <i>Daphnia magna</i>	48 hours	OECD 202
	Chronic NOEL >100 mg/l	Algae - <i>Pseudokirchneriella subcapitata</i>	72 hours	OECD 201
	Chronic NOEL >1000 mg/l	Crustaceans - <i>Daphnia magna</i>	21 days	-
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Acute EL50 >10000 mg/l	Crustaceans - <i>Daphnia magna</i>	48 hours	OECD 202
	Acute LL50 >1000 mg/l	Fish - <i>Oncorhynchus mykiss</i>	96 hours	OECD 203
	Chronic NOEL >1000 mg/l	Crustaceans - <i>Daphnia magna</i>	21 days	OECD 211
Distillates (petroleum), solvent-dewaxed light paraffinic	Acute EL50 >100 mg/l	Algae - <i>Pseudokirchneriella subcapitata</i>	72 hours	OECD 201
	Acute EL50 10000 mg/l	Crustaceans - <i>Daphnia magna</i>	48 hours	OECD 202
	Acute EL50 ≥100 mg/l Chronic NOEL >100 mg/l	Fish - <i>Pimephales promelas</i> Algae - <i>Pseudokirchneriella</i>	96 hours 72 hours	OECD 203 OECD 201

Paraffin oils (petroleum), catalytic dewaxed heavy	Chronic NOEL >1000 mg/l	<i>subcapitata</i> Crustaceans - <i>Daphnia magna</i>	21 days	OECD 211
	Acute EC50 10000 mg/l	Daphnia	48 hours	-
	Acute NOEL 101 mg/l	Algae - <i>Pseudokirchneriella subcapitata</i>	72 hours	-
Distillates (petroleum), hydrotreated light paraffinic	Acute EC50 >100 mg/l	Algae - <i>Pseudokirchnerella subcapitata</i>	48 hours	OECD 201
	Acute EC50 >10000 mg/l	Daphnia - <i>Daphnia magna</i>	48 hours	OECD 202
	Chronic NOEL 10 mg/l	Daphnia - <i>Daphnia magna</i>	21 days	OECD 211
	Chronic NOEL >1000 mg/l	Fish - <i>Oncorhynchus mykiss</i>	21 days	-
Distillates (petroleum), solvent-refined light paraffinic	Acute EC50 >100 mg/l	Algae - <i>Pseudokirchnerella subcapitata</i>	48 hours	OECD 201
	Acute EC50 >10000 mg/l	Daphnia - <i>Daphnia Magna</i>	48 hours	OECD 202
	Chronic NOEL 10 mg/l	Daphnia - <i>Daphnia Magna</i>	21 days	OECD 211
	Chronic NOEL >1000 mg/l	Fish - <i>Oncorhynchus mykiss</i>	21 days	-
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis (dithiophosphate)	Acute EC50 2 mg/l	Algae - <i>Selenastrum capricornutum</i>	96 hours	OECD 201
	Acute EC50 5.4 mg/l	Crustaceans - <i>Daphnia magna</i>	48 hours	OECD 202
	Acute LC50 4.5 mg/l	Fish - <i>Oncorhynchus mykiss</i>	96 hours	OECD 203
	Chronic NOEC 1 mg/l	Algae - <i>Selenastrum capricornutum</i>	96 hours	OECD 201
	Chronic NOEC 0.4 mg/l	Crustaceans - <i>Daphnia magna</i>	48 hours	OECD 211

## Persistence and degradability

Product/substance	Test	Result	Dose	Inoculum
Distillates (petroleum), hydrotreated heavy paraffinic	OECD 301F	31 % - Not readily - 28 days	-	Activated sludge
Distillates (petroleum), solvent-dewaxed heavy paraffinic	OECD 301F	31 % - Not readily - 28 days	-	Activated sludge
Distillates (petroleum), solvent-dewaxed light paraffinic	OECD 301F	31 % - Not readily - 28 days	-	Activated sludge
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis (dithiophosphate)	OECD 301B	0 % - Not readily - 28 days	-	Activated sludge

Product/substance	Aquatic half-life	Photolysis	Biodegradability
Distillates (petroleum), hydrotreated heavy paraffinic	-	-	Not readily
Distillates (petroleum), solvent-dewaxed heavy paraffinic	-	-	Not readily
Distillates (petroleum), solvent-dewaxed light paraffinic	-	-	Not readily
Paraffin oils (petroleum), catalytic dewaxed heavy	-	-	Not readily
zinc bis[O-(6-methylheptyl)]	-	-	Not readily

bis[O-(sec-butyl)] bis  
(dithiophosphate)

## Bioaccumulative potential

Product/substance	LogK <sub>ow</sub>	BCF	Potential
Distillates (petroleum), hydrotreated heavy paraffinic	>4	-	High
Distillates (petroleum), solvent-dewaxed heavy paraffinic	9.2	260	Low
Distillates (petroleum), solvent-dewaxed light paraffinic	3.1	-	Low
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis (dithiophosphate)	0.9	-	Low

## Mobility in soil

Soil/water partition  
coefficient (K<sub>oc</sub>)

: Not available.

Mobility in soil

: Given its physical and chemical characteristics, the product generally shows low soil mobility The product is insoluble and floats on water Loss by evaporation is limited

## 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. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	DOT Classification	IMDG	ICAO/IATA
UN/ID No	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.

## Additional information

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

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

## Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) PAIR**: Siloxanes and Silicones, di-Me  
**TSCA 8(a) CDR Exempt/Partial exemption**: Not determined  
**Clean Water Act (CWA) 307**: zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis (dithiophosphate)

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

Not applicable.

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

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Not applicable.

#### Composition/information on ingredients

Name	%	Classification
Distillates (petroleum), hydrotreated heavy paraffinic	≤3	ASPIRATION HAZARD - Category 1
Distillates (petroleum), solvent-dewaxed heavy paraffinic	≤3	ASPIRATION HAZARD - Category 1
Distillates (petroleum), solvent-dewaxed light paraffinic	≤3	ASPIRATION HAZARD - Category 1
Paraffin oils (petroleum), catalytic dewaxed heavy	≤3	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light paraffinic	≤3	ASPIRATION HAZARD - Category 1
Distillates (petroleum), solvent-refined light paraffinic	≤3	ASPIRATION HAZARD - Category 1
zinc bis[O-(6-methylheptyl)] bis	≤3	SKIN IRRITATION - Category 2

[O-(sec-butyl)] bis  
(dithiophosphate)

SERIOUS EYE DAMAGE - Category 1

## SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis (dithiophosphate)	113706-15-3	≤3
Supplier notification	Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis (dithiophosphate)	113706-15-3	≤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

### 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; MINERAL OIL, PETROLEUM PARAFFIN OILS, CATALYTIC DEWAXED HEAVY; MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED LIGHT PARAFFINIC; MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-REFINED LIGHT PARAFFINIC

### New York

: None of the components are listed.

### New Jersey

: The following components are listed: ZINC compounds

### Pennsylvania

: The following components are listed: ZINC COMPOUNDS

### California Prop. 65

To the best of our knowledge, this product does not contain any substances known to the State of California to cause cancer, developmental and/or reproductive harm

## 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 inventory (AIIC)

: All components are listed or exempted.

### Canada inventory (DSL/NDL)

: All components are listed or exempted.

### China inventory (IECSC)

: All components are listed, exempted, or notified.

### Europe inventory (EC)

: All components are listed or exempted.

### Japan inventory

: **Japan inventory (CSCL)**: All components are listed or exempted.

**Japan inventory (ISHL)**: 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)

: Not determined.



<b>Taiwan Chemical Substances Inventory (TCSI)</b>	: Not determined.
<b>Thailand inventory</b>	: Not determined.
<b>Turkey inventory</b>	: Not determined.
<b>United States inventory (TSCA 8b)</b>	: All components are listed or exempted.
<b>Vietnam inventory</b>	: Not determined.

The information stated in this section relates solely to the conformity of the chemical product with the countries Inventories. The information used to confirm the inventory status of this product may be based on additional data to the chemical composition shown in Section 3. Other regulations may apply for importation or marketing authorizations.

## Section 16. Other information

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

Health	/	1
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.)



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

### Procedure used to derive the classification

Classification	Justification
Not classified.	

### History

<b>Date of revision</b>	: 2024/09/16
<b>previous revision date</b>	: 2024/05/15
<b>Version</b>	: 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.

## Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.