



SAFETY DATA SHEET

According to the Hazard Communication Standard, 29 CFR 1910.1200

QUARTZ 9000 ENERGY 5W-40

SDS # : 37159

Section 1. Identification

GHS product identifier : QUARTZ 9000 ENERGY 5W-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

TotalEnergies Marketing Puerto Rico Corp
Millennium Park Plaza, #15 Road 2, Suite 525
Guaynabo, P.R. 00968
Phone: 1-787-783-4625

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

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: Not classified.

GHS label elements

Signal word

: No signal word.

Hazard statements

: No known significant effects or critical hazards.

Precautionary statements

Prevention

: Not applicable.

Response

: Not applicable.

Storage

: Not applicable.

Disposal

: Not applicable.

Supplemental label elements

: Avoid contact with skin and clothing. Wash thoroughly after handling.

Hazards not otherwise classified

: Prolonged or repeated contact may dry skin and cause irritation.



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Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	% (w/w)	CAS number
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	≥25 - ≤50	72623-87-1
Distillates (petroleum), hydrotreated heavy paraffinic	≤5	64742-54-7
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	≤3	72623-86-0
Distillates (petroleum), solvent-dewaxed heavy paraffinic	≤3	64742-65-0
Distillates (petroleum), solvent-dewaxed light paraffinic	≤3	64742-56-9
C14-16-18 Alkyl phenol	≤3	-
Paraffin oils (petroleum), catalytic dewaxed heavy	≤3	64742-70-7
zinc bis(O,O-diisooctyl) bis(dithiophosphate)	≤3	28629-66-5

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. Continue to rinse for at least 10 minutes. Get medical attention.

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 adverse health effects persist or are severe. 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

- Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. 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 if adverse health effects persist or are severe. 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



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- 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. 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 dry chemical, CO₂, 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
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.



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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).

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. 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. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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



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Ingredient name	Exposure limits
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	NIOSH REL (United States, 10/2020). [OIL MIST MINERAL] TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist ACGIH TLV (United States, 1/2022). [Mineral Oil, pure, highly and severely refined] TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2020). [OIL MIST MINERAL] TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist OSHA PEL (United States, 5/2018). [Oil mist, mineral] TWA: 5 mg/m³ 8 hours. OSHA PEL (United States, 5/2018). [Oil mist, mineral] TWA: 5 mg/m³ 8 hours.
Distillates (petroleum), hydrotreated heavy paraffinic	ACGIH TLV (United States, 1/2022). [Mineral Oil, pure, highly and severely refined] TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2020). [OIL MIST MINERAL] TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist OSHA PEL (United States, 5/2018). [Oil mist, mineral] TWA: 5 mg/m³ 8 hours. ACGIH TLV (United States, 1/2022). [Mineral Oil, pure, highly and severely refined] TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2020). [OIL MIST MINERAL] TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist OSHA PEL (United States, 5/2018). [Oil mist, mineral] TWA: 5 mg/m³ 8 hours.
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	ACGIH TLV (United States, 1/2022). [Mineral Oil, pure, highly and severely refined] TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2020). [OIL MIST MINERAL] TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist OSHA PEL (United States, 5/2018). [Oil mist, mineral] TWA: 5 mg/m³ 8 hours. ACGIH TLV (United States, 1/2022). [Mineral Oil, pure, highly and severely refined] TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2020). [OIL MIST MINERAL] TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist OSHA PEL (United States, 5/2018). [Oil mist, mineral] TWA: 5 mg/m³ 8 hours.
Distillates (petroleum), solvent-dewaxed heavy paraffinic	ACGIH TLV (United States, 1/2022). [Mineral Oil, pure, highly and severely refined] TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2020). [OIL MIST MINERAL] TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist OSHA PEL (United States, 5/2018). [Oil mist, mineral] TWA: 5 mg/m³ 8 hours. ACGIH TLV (United States, 1/2022). [Mineral Oil, pure, highly and severely refined] TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2020). [OIL MIST MINERAL] TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist OSHA PEL (United States, 5/2018). [Oil mist, mineral] TWA: 5 mg/m³ 8 hours.
Distillates (petroleum), solvent-dewaxed light paraffinic	ACGIH TLV (United States, 1/2022). [Mineral Oil, pure, highly and severely refined] TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2020). [OIL MIST MINERAL] TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist OSHA PEL (United States, 5/2018). [Oil mist, mineral] TWA: 5 mg/m³ 8 hours. ACGIH TLV (United States, 1/2022). [Mineral Oil, pure, highly and severely refined] TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2020). [OIL MIST MINERAL] TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist OSHA PEL (United States, 5/2018). [Oil mist, mineral] TWA: 5 mg/m³ 8 hours.
C14-16-18 Alkyl phenol Paraffin oils (petroleum), catalytic dewaxed heavy	None. OSHA PEL (United States, 5/2018). [Oil mist, mineral] TWA: 5 mg/m³ 8 hours.



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zinc bis(O,O-diisooctyl) bis(dithiophosphate)	<p>ACGIH TLV (United States, 1/2022). [Mineral Oil, pure, highly and severely refined] TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction</p> <p>NIOSH REL (United States, 10/2020). [OIL MIST MINERAL] TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist None.</p>
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Biological exposure indices

No exposure indices known.

Advisory OEL

- : Mineral oil mist: USA: OSHA (PEL) TWA 5 mg/m³, NIOSH (REL) TWA 5 mg/m³, STEL 10 mg/m³, ACGIH (TLV) TWA 5 mg/m³ (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.



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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. [limpid]
Color	: Yellow.
Odor	: Characteristic.
Odor threshold	: Not available.
pH	: Not applicable.
Melting point/freezing point	: Technically not possible to measure
Boiling point	: >316°C (>600.8°F) [ISO 3405]
Flash point	: Open cup: 236°C (456.8°F) [ASTM D 92]
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not applicable.
Lower and upper explosive (flammable) limits	: Lower: 0.9% Upper: 7%
Vapor pressure	: <0.013 kPa (<0.1 mm Hg) [room temperature] Not applicable. [50°C]
Vapor density	: >2 [Air = 1]
Relative density	: 0.852 [ISO 12185]
Density	: 0.852 g/cm³ [15°C] [ISO 12185]
Solubility(ies)	:

Media	Result
water	Not soluble

Miscible with water	: No.
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Partition coefficient: n-octanol/water	: Not applicable.
Auto-ignition temperature	: >236°C (>456.8°F) [ASTM E 659]
Decomposition temperature	: Not applicable.
Viscosity	: Kinematic (40°C (104°F)): 80.5 mm²/s (80.5 cSt) [ISO 3104]
Flow time (ISO 2431)	: Not available.

Particle characteristics

Median particle size	: Not applicable.
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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.



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Incompatible materials : Strong oxidizing agents**Hazardous decomposition products** : carbon monoxide
carbon dioxide
phosphorus oxides
sulfur oxides
Hydrogen sulfide
Mercaptans
Zinc oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/substance	Result	Species	Dose	Exposure	Test
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	LC50 Inhalation Dusts and mists	Rat	5.1 mg/l	4 hours	OECD 403
	LD50 Dermal	Rabbit - Male, Female	>5000 mg/kg	-	OECD 402
	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-	Read across OECD 401
Distillates (petroleum), hydrotreated heavy paraffinic	LC50 Inhalation Dusts and mists	Rat - Male, Female	>5 mg/l	4 hours	Read across OECD 403
	LD50 Dermal	Rabbit - Male, Female	>5000 mg/kg	-	OECD 402
	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-	Read across OECD 401
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	LC50 Inhalation Dusts and mists	Rat	5.53 mg/l	4 hours	Read across OECD 403
	LD50 Dermal	Rabbit	>5000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 401
Distillates (petroleum), solvent-dewaxed heavy 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
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 420
C14-16-18 Alkyl phenol	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	LD50 Dermal	Rat	2000 mg/kg	-	-
	LD50 Oral	Rat	2000 mg/kg	-	-
	LC50 Inhalation Dusts and mists	Rat	5.1 mg/l	4 hours	-
zinc bis(O,O-diisooctyl) bis (dithiophosphate)	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	-	-
zinc bis(O,O-diisooctyl) bis (dithiophosphate)	LD50 Oral	Rat	>5000 mg/kg	-	-
	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	Rat	3001 mg/kg	-	OECD 402



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	LD50 Oral	Rat	3750 mg/kg	-	OECD 401
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Conclusion/Summary : Based on available data, the classification criteria are not met.

Irritation/Corrosion

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

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, classification is not required. Contains sensitizer. May produce an allergic reaction.

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

Mutagenicity

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

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

Teratogenicity

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)

Name	Category	Route of exposure	Target organs
C14-16-18 Alkyl phenol	Category 2	-	liver

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

Aspiration hazard

Name	Result
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based Distillates (petroleum), hydrotreated heavy paraffinic	ASPIRATION HAZARD - Category 1
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based 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

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



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- 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

Not available.

- General** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : 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)
QUARTZ 9000 ENERGY 5W-40 Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	257678.8 N/A	206211.8 N/A	N/A N/A	N/A N/A	N/A 5.1
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	N/A	N/A	N/A	N/A	5.53
Paraffin oils (petroleum), catalytic dewaxed heavy zinc bis(O,O-diisooctyl) bis(dithiophosphate)	N/A 3750	N/A 3001	N/A N/A	20.1 20.1	5.1 5.1

Other information :

Not available.



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Section 12. Ecological information

Toxicity

Product/substance	Result	Species	Exposure	Test
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	Acute EL50 >100 mg/l Acute EL50 >10000 mg/l Acute LL50 >100 mg/l Chronic NOEL >100 mg/l Chronic NOEL >1000 mg/l	Algae - <i>Pseudokirchneriella subcapitata</i> Crustaceans - <i>Daphnia magna</i> Fish - <i>Pimephales promelas</i> Algae - <i>Pseudokirchneriella subcapitata</i> Crustaceans - <i>Daphnia magna</i>	48 hours 48 hours 96 hours 72 hours 21 days	OECD 201 OECD 202 OECD 203 OECD 201 OECD 211
Distillates (petroleum), hydrotreated heavy paraffinic	Acute EC50 >100 mg/l Acute EC50 >10000 mg/l Chronic NOEL >100 mg/l Chronic NOEL >1000 mg/l	Algae - <i>Pseudokirchneriella subcapitata</i> Crustaceans - <i>Daphnia magna</i> Algae - <i>Pseudokirchneriella subcapitata</i> Crustaceans - <i>Daphnia magna</i>	72 hours 48 hours 72 hours 21 days	OECD 201 OECD 202 OECD 201 -
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	Acute EL50 >100 mg/l Acute EL50 >10000 mg/l Acute LL50 >1000 mg/l Chronic NOEL >100 mg/l Chronic NOEL >1000 mg/l	Algae - <i>Pseudokirchneriella subcapitata</i> Crustaceans - <i>Daphnia magna</i> Fish - <i>Pimephales promelas</i> Algae - <i>Pseudokirchneriella subcapitata</i> Crustaceans - <i>Daphnia magna</i>	72 hours 48 hours 96 hours 72 hours 21 days	OECD 201 OECD 202 OECD 203 OECD 201 OECD 211
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Acute EL50 >10000 mg/l Acute LL50 >1000 mg/l Chronic NOEL >1000 mg/l	Crustaceans - <i>Daphnia magna</i> Fish - <i>Oncorhynchus mykiss</i> Crustaceans - <i>Daphnia magna</i>	48 hours 96 hours 21 days	OECD 202 OECD 203 OECD 211
Distillates (petroleum), solvent-dewaxed light paraffinic	Acute EL50 >100 mg/l Acute EL50 10000 mg/l Acute EL50 ≥100 mg/l Chronic NOEL >100 mg/l	Algae - <i>Pseudokirchneriella subcapitata</i> Crustaceans - <i>Daphnia magna</i> Fish - <i>Pimephales promelas</i> Algae - <i>Pseudokirchneriella subcapitata</i>	72 hours 48 hours 96 hours 72 hours	OECD 201 OECD 202 OECD 203 OECD 201
C14-16-18 Alkyl phenol Paraffin oils (petroleum), catalytic dewaxed heavy	Acute EC50 >100 mg/l Acute EC50 10000 mg/l Acute NOEL 101 mg/l	Daphnia - <i>Daphnia magna</i> Daphnia Algae - <i>Pseudokirchneriella subcapitata</i>	48 hours 48 hours 72 hours	OECD 202 - -
zinc bis(O,O-diisooctyl) bis (dithiophosphate)	Acute EC50 1 to 1.5 mg/l Acute LC50 10 mg/l	Daphnia Fish	48 hours 96 hours	OECD 202 -



TotalEnergies

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Persistence and degradability

Product/substance	Test	Result	Dose	Inoculum
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	OECD 301F	31 % - Not readily - 28 days	-	Activated sludge
Distillates (petroleum), hydrotreated heavy paraffinic	OECD 301F	31 % - Not readily - 28 days	-	Activated sludge
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	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

Product/substance	Aquatic half-life	Photolysis	Biodegradability
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	-	-	Not readily
Distillates (petroleum), hydrotreated heavy paraffinic	-	-	Not readily
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	-	-	Not readily
Distillates (petroleum), solvent-dewaxed heavy paraffinic	-	-	Not readily
Distillates (petroleum), solvent-dewaxed light paraffinic	-	-	Not readily
Paraffin oils (petroleum), catalytic dewaxed heavy zinc bis(O,O-diisooctyl) bis (dithiophosphate)	-	-	Not readily
	-	-	Not readily

Bioaccumulative potential

Product/substance	LogK _{ow}	BCF	Potential
Distillates (petroleum), hydrotreated heavy paraffinic	>4	-	High
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	6.1	-	High
Distillates (petroleum), solvent-dewaxed heavy paraffinic	9.2	260	Low
Distillates (petroleum), solvent-dewaxed light paraffinic	3.1	-	Low
zinc bis(O,O-diisooctyl) bis (dithiophosphate)	2.9	-	Low

Mobility in soil



TotalEnergies

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Soil/water partition coefficient (K_{oc})

: 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.

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) CDR Exempt/Partial exemption:** Not determined

Clean Water Act (CWA) 307: zinc bis(O,O-diisooctyl) bis(dithiophosphate); zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)

Clean Air Act Section 112 : Not listed

(b) Hazardous Air Pollutants (HAPs)



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Clean Air Act Section 602 : Not listed
Class I Substances

Clean Air Act Section 602 : Not listed
Class II Substances

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 : HNOC - Defatting irritant

Composition/information on ingredients

Name	%	Classification
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	≥25 - ≤50	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated heavy paraffinic	≤5	ASPIRATION HAZARD - Category 1
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	≤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
C14-16-18 Alkyl phenol	≤3	SKIN SENSITIZATION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
Paraffin oils (petroleum), catalytic dewaxed heavy zinc bis(O,O-diisoctyl) bis(dithiophosphate)	≤3	ASPIRATION HAZARD - Category 1 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	zinc bis(O,O-diisoctyl) bis(dithiophosphate)	28629-66-5	≤3
Supplier notification	zinc bis(O,O-diisoctyl) bis(dithiophosphate)	28629-66-5	≤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; MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED LIGHT PARAFFINIC; MINERAL OIL, PETROLEUM PARAFFIN OILS, CATALYTIC DEWAXED HEAVY

New York : None of the components are listed.

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New Jersey

: The following components are listed: MINERAL OIL (UNTREATED and MILDLY TREATED); MINERAL OIL (UNTREATED and MILDLY TREATED); 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/NDSL)

: 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)

: All components are listed or exempted.

Taiwan Chemical Substances Inventory (TCSI)

: All components are listed or exempted.

Thailand inventory

: Not determined.

Turkey inventory

: Not determined.

United States inventory (TSCA 8b)

: All components are listed or exempted.

Vietnam inventory

: 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

**TotalEnergies**

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



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Procedure used to derive the classification

Classification	Justification
Not classified.	

History

Date of revision	:	2023/10/11
previous revision date	:	2023/08/01
Version	:	1.03
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

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