

SAFETY DATA SHEET

According to the Hazard Communication Standard, 29 CFR 1910.1200

RUBIA OPTIMA 1100 15W-40

SDS #: 087157

Section 1. Identification

GHS product identifier : RUBIA OPTIMA 1100 15W-40

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

Identified uses

Engine oil

Supplier's details

 TotalEnergies Marketing Puerto Rico Corp Millennium Park Plaza, #15 Road 2, Suite 525

Guaynabo, P.R. 00968 Phone: 1-787-783-4625

ProductSafety@totalenergies.com

TotalEnergies Lubrifiants
562 Avenue du Parc de L'ile
92029 Nanterre Cedex FRANCE
Tél: +33 (0)1 41 35 40 00

Tél: +33 (0)1 41 35 40 00 Fax: +33 (0)1 41 35 84 71

m.msds-lubs@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 known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Hazards not otherwise : None known.

classified

Date of revision : 2024/05/16 1.02 USA ENGLISH 1/15



SDS #: 087157

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	% (w/w)	CAS number
vistillates (petroleum), hydrotreated heavy paraffinic	≤3	64742-54-7
Distillates (petroleum), solvent-dewaxed heavy paraffinic	≤3	64742-65-0
Distillates (petroleum), solvent-dewaxed light paraffinic	≤3	64742-56-9
Paraffin oils (petroleum), catalytic dewaxed heavy	≤3	64742-70-7
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)	≤3	113706-15-3

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 : Immed

: 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 contactInhalationNo known significant effects or critical hazards.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.

Date of revision : 2024/05/16 1.02 USA ENGLISH 2/15



SDS#: 087157

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, CO₂, water spray (fog) or foam.

Unsuitable extinguishing

media

: Do not use water jet.

Specific hazards arising from the chemical

Hazardous thermal decomposition products : In a fire or if heated, a pressure increase will occur and the container may burst.

: carbon monoxide carbon dioxide Silicon 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

Remark

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

: 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 nonemergency 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.

Date of revision : 2024/05/16 1.02 USA **ENGLISH** 3/15



SDS#: 087157

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 noncombustible, 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 Advice on general occupational hygiene

- : Put on appropriate personal protective equipment (see Section 8).
- 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.

including any incompatibilities

Conditions for safe storage, : 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

Ingredient name	Exposure limits
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.
Distillates (petroleum), solvent-dewaxed heavy paraffinic	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
Distillates (petroleum), solvent-dewaxed light paraffinic	OSHA PEL (United States, 5/2018). [Oil mist, mineral] TWA: 5 mg/m³ 8 hours.

Date of revision : 2024/05/16 1.02 USA **ENGLISH**



SDS #: 087157

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

zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)

Paraffin oils (petroleum), catalytic dewaxed heavy

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

Environmental exposure controls

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

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.

Date of revision : 2024/05/16 1.02 USA ENGLISH 5/15



SDS #: 087157

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: Mone 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. [limpid]

Color : Amber.

Odor : Characteristic.
Odor threshold : Not available.
pH : Not applicable.

Melting point/freezing point : Technically not possible to measure

Pour point : -36°C (-32.8°F)

Boiling point : >316°C (>600.8°F) [ISO 3405]

Flash point : Open cup: >220°C (>428°F) [ASTM D 92]

Evaporation rate : Not available.

Flammability (solid, gas) : Mon-flammable.

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 : 0.87 [ISO 12185]

Density : 0.87 g/cm³ [15°C] [ISO 12185]

Solubility(ies) :

Media	Result
water	Not soluble

Miscible with water : No.

Partition coefficient: n-

octanol/water

: Not applicable.

Auto-ignition temperature : >250°C (>482°F) [ASTM E 659]

Decomposition temperature: Not applicable.

Viscosity : Kinematic (40°C (104°F)): 112 mm²/s (112 cSt) [ISO 3104]

Flow time (ISO 2431) : Not available.

Particle characteristics

Median particle size : Not applicable.

Date of revision : 2024/05/16 1.02 USA ENGLISH 6/15



SDS #: 087157

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

: carbon monoxide carbon dioxide Silicon 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
D istillates (petroleum),	LC50 Inhalation Dusts	Rat - Male,	>5 mg/l	4 hours	OECD 403
hydrotreated heavy paraffinic	and mists	Female			Read across
	LD50 Dermal	Rabbit - Male,	>5000 mg/kg	-	OECD 402
		Female			Read across
	LD50 Oral	Rat - Male,	>5000 mg/kg	-	OECD 401
		Female			Read across
Distillates (petroleum),	LC50 Inhalation Dusts	Rat	>5 mg/l	4 hours	OECD 403
solvent-dewaxed heavy paraffinic	and mists				
	LD50 Dermal	Rabbit	>5000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 420
Distillates (petroleum),	LC50 Inhalation Dusts	Rat	>5 mg/l	4 hours	OECD 403
solvent-dewaxed light	and mists				
paraffinic					
	LD50 Dermal	Rabbit	>5000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 401
Paraffin oils (petroleum),	LC50 Inhalation Dusts	Rat	5.1 mg/l	4 hours	-
catalytic dewaxed heavy	and mists				
	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	-	-
zinc bis[O-(6-methylheptyl)]	LC50 Inhalation Dusts	Rat - Male	>2 mg/l	1 hours	OECD 403
bis[O-(sec-butyl)] bis	and mists				
(dithiophosphate)					
,	LD50 Dermal	Rabbit - Male,	>3160 mg/kg	-	OECD 402



TotalEnergies sps #: 087157

	Female			
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

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. 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

Date of revision : 2024/05/16 1.02 USA ENGLISH 8/15



TotalEnergies sps #: 087157

Name	Result
Distillates (petroleum), solvent-dewaxed heavy paraffinic Distillates (petroleum), solvent-dewaxed light paraffinic	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 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 contactInhalationNo known significant effects or critical hazards.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

: Not available.

effects

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	-
, , ,		Rat - Male, Female	160 mg/kg	-

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 : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Date of revision : 2024/05/16 1.02 USA ENGLISH 9/15



SDS #: 087157

Product/substance	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/ I)
RUBIA OPTIMA 1100 15W-40	179489.8	172586.4	N/A	N/A	N/A
Paraffin oils (petroleum), catalytic dewaxed heavy	N/A	N/A	N/A	20.1	5.1
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis (dithiophosphate)	2600	2500	N/A	N/A	N/A

Other information

Not available.

Section 12. Ecological information

Toxicity

Product/substance	Result	Species	Exposure	Test
istillates (petroleum), hydrotreated heavy paraffinic	Acute EC50 >100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	OECD 201
	Acute EC50 >10000 mg/l	Crustaceans - Daphnia magna	48 hours	OECD 202
	Chronic NOEL >100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	OECD 201
	Chronic NOEL >1000 mg/l	Crustaceans - Daphnia magna	21 days	-
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Acute EL50 >10000 mg/l	Crustaceans - Daphnia magna	48 hours	OECD 202
	Acute LL50 >1000 mg/l	Fish - Oncorhynchus mykiss	96 hours	OECD 203
	Chronic NOEL >1000 mg/l	Crustaceans - Daphnia magna	21 days	OECD 211
Distillates (petroleum), solvent-dewaxed light paraffinic	Acute EL50 >100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	OECD 201
F-3-3	Acute EL50 10000 mg/l	Crustaceans - Daphnia magna	48 hours	OECD 202
	Acute EL50 ≥100 mg/l	Fish - Pimephales promelas	96 hours	OECD 203
	Chronic NOEL >100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	OECD 201
	Chronic NOEL >1000 mg/l	Crustaceans - Daphnia magna	21 days	OECD 211
Paraffin oils (petroleum), catalytic dewaxed heavy	Acute EC50 10000 mg/l	Daphnia	48 hours	-
	Acute NOEL 101 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	-
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis (dithiophosphate)	Acute EC50 2 mg/l	Algae - Selenastrum capricornutum	96 hours	OECD 201
	Acute EC50 5.4 mg/l	Crustaceans - Daphnia magna	48 hours	OECD 202
	Acute LC50 4.5 mg/l	Fish - Oncorhynchus mykiss	96 hours	OECD 203
	Chronic NOEC 1 mg/l	Algae - Selenastrum	96 hours	OECD 201
	Chronic NOEC 0.4 mg/l	Crustaceans - Daphnia	48 hours	OECD 211
D	1	ı		1 1

Date of revision : 2024/05/16 1.02 USA ENGLISH 10/15



lotalEnergies sps #: 087157

|--|

Persistence and degradability

Product/substance	Test	Result	Dose	Inoculum
vistillates (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	-	-	Not readily
paraffinic Distillates (petroleum), solvent-dewaxed light paraffinic	-	-	Not readily
Paraffin oils (petroleum), catalytic dewaxed heavy	-	-	Not readily
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis (dithiophosphate)	1	-	Not readily

Bioaccumulative potential

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

Mobility in soil

Soil/water partition coefficient (Koc)

: 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.

Date of revision : 2024/05/16 1.02 USA ENGLISH 11/15



SDS#: 087157

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: Not available. to IMO instruments

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)

Clean Air Act Section 112

(b) Hazardous Air **Pollutants (HAPs)** : Not listed

Clean Air Act Section 602

: Not listed

Class I Substances

: Not listed

Clean Air Act Section 602 Class II Substances

Date of revision : 2024/05/16 1.02 USA **ENGLISH** 12/15



SDS #: 087157

DEA List I Chemicals

(Precursor Chemicals)

DEA List II Chemicals : Not listed

(Essential Chemicals)

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

: Not listed

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

Name	%	Classification
 ∑ istillates (petroleum),	≤3	ASPIRATION HAZARD - Category 1
hydrotreated heavy paraffinic		
Distillates (petroleum), solvent-	≤3	ASPIRATION HAZARD - Category 1
dewaxed heavy paraffinic		
Distillates (petroleum), solvent-	≤3	ASPIRATION HAZARD - Category 1
dewaxed light paraffinic		
Paraffin oils (petroleum),	≤3	ASPIRATION HAZARD - Category 1
catalytic dewaxed heavy		
zinc bis[O-(6-methylheptyl)] bis	≤3	SKIN IRRITATION - Category 2
[O-(sec-butyl)] bis		SERIOUS EYE DAMAGE - Category 1
(dithiophosphate)		

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; MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED LIGHT PARAFFINIC; MINERAL OIL, PETROLEUM PARAFFIN OILS, CATALYTIC

DEWAXED HEAVY

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.

Date of revision : 2024/05/16 1.02 USA ENGLISH 13/15



SDS #: 087157

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)

Canada inventory (DSL/NDSL)

China inventory (IECSC)

Europe inventory (EC)

Japan inventory

: Not determined.

: All components are listed or exempted.

: Not determined.

: All components are listed or exempted.

: Japan inventory (CSCL): All components are listed or

exempted.

Japan inventory (ISHL): All components are listed or

exempted.

New Zealand Inventory of Chemicals (NZIoC)

Philippines inventory (PICCS)

Korea inventory (KECI)

Taiwan Chemical Substances Inventory (TCSI)

Thailand inventory

Turkey inventory

United States inventory (TSCA 8b)

Vietnam inventory

: All components are listed or exempted.

: Not determined.

: Not determined.

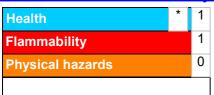
: All components are listed or exempted.

: 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.)



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.)



Date of revision : 2024/05/16 1.02 USA ENGLISH 14/15



SDS #: 087157

Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

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

Date of revision : 2024/05/16 previous revision date : 2024/01/25

Version : 1.02

Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available SGG = Segregation Group UN = United Nations

References : Not available.

Indicates information that has changed from previously issued version.

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.

Date of revision : 2024/05/16 1.02 USA ENGLISH 15/15