SAFETY DATA SHEET



HIGH PERFORMANCE SAE 15W-40 HD

	ication			
GHS product identifier	: HIGH PERFORMANCE SAE 15W-40 HD			
Product code	: 301902175008			
Other means of identification	: Not available.			
Product type	: Liquid.			
	the substance or mixture and uses advised against			
Identified uses				
Lubricating Oil				
Uses advised against	Reason			
None known.				
Supplier's details	: Calumet Branded Products, LLC 2780 Waterfront Pkwy E. Drive Suite 200 Indianapolis, IN 46214 USA Technical Services:317-328-5660			
Emergency telephone number	: 24 hr. CHEMTREC 1-800-424-9300 / International 1-703-527-3887			
Section 2. Hazard	Is identification			
OSHA/HCS status Classification of the	 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. AQUATIC HAZARD (ACUTE) - Category 3 			
substance or mixture	AQUATIC HAZARD (LONG-TERM) - Category 3			
GHS label elements				
<u>GHS label elements</u> Signal word	: No signal word.			
	 No signal word. Harmful to aquatic life with long lasting effects. 			
Signal word	: Harmful to aquatic life with long lasting effects.			
Signal word Hazard statements	: Harmful to aquatic life with long lasting effects.			
Signal word Hazard statements Precautionary statements	 Harmful to aquatic life with long lasting effects. Read label before use. Keep out of reach of children. If medical advice is needed, have 			
Signal word Hazard statements <u>Precautionary statements</u> General	 Harmful to aquatic life with long lasting effects. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. 			
Signal word Hazard statements <u>Precautionary statements</u> General Prevention	 Harmful to aquatic life with long lasting effects. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Avoid release to the environment. 			
Hazard statements <u>Precautionary statements</u> General Prevention Response	 Harmful to aquatic life with long lasting effects. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Avoid release to the environment. Not applicable. 			

Section 3. Composition/information on ingredients

Substance/mixture Other means of identification

- : Mixture
- : Not available.

Ingredient name	%	CAS number
Distillates (petroleum), hydrotreated heavy paraffinic	≥25 - ≤50	64742-54-7
Distillates (petroleum), hydrotreated heavy paraffinic	≥25 - ≤40	64742-54-7
Dec-1-ene, homopolymer, hydrogenated	≥10 - ≤15	68037-01-4
Distillates (petroleum), solvent-dewaxed heavy paraffinic	≤10	64742-65-0
Lubricating oils (petroleum), hydrotreated spent	≤10	64742-58-1
Distillates (petroleum), solvent-dewaxed light paraffinic	≤2.8	64742-56-9
Paraffin oils (petroleum), catalytic dewaxed heavy	≤2.1	64742-70-7
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	≤1.6	113706-15-3
Phenol, dodecyl-, branched	≤0.1	121158-58-5

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

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

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

Section 4. First aid measures

Description of necessar	<u>y first aid measures</u>
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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	 Flush contaminated skin with plenty of water. 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.
Most important sympto	ms/effects, acute and delayed
Potential acute health	<u>effects</u>
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/s	symptoms
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.

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

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Section 4. First aid measures

Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
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 an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides phosphorus oxides metal oxide/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.

Section 6. Accidental release measures

Personal precautions, protect	ive 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). Water polluting material. May be harmful to the environment if released in large quantities.		
Methods and materials for containment and cleaning up			
Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.		

Section 6. Accidental release measures

Large spill	: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. 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	t on appropriate personal protective equipment (see Section 8). ntact with eyes, skin and clothing. Avoid breathing vapor or mist environment. Keep in the original container or an approved alto npatible material, kept tightly closed when not in use. Empty co duct residue and can be hazardous. Do not reuse container.	t. Avoid release to ernative made from a
Advice on general occupational hygiene	ting, drinking and smoking should be prohibited in areas where t indled, stored and processed. Workers should wash hands and inking and smoking. Remove contaminated clothing and protect ering eating areas. See also Section 8 for additional information asures.	face before eating, ive equipment before
Conditions for safe storage, including any incompatibilities	The in accordance with local regulations. Store in original contain act sunlight in a dry, cool and well-ventilated area, away from inc e Section 10) and food and drink. Keep container tightly closed dy for use. Containers that have been opened must be carefull ight to prevent leakage. Do not store in unlabeled containers. I ntainment to avoid environmental contamination. See Section 1 terials before handling or use.	compatible materials and sealed until y resealed and kept Use appropriate

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/m ³ 8 hours. Form: Inhalable fraction OSHA PEL (United States, 5/2018). [Oil mist, mineral] TWA: 5 mg/m ³ 8 hours. NIOSH REL (United States, 10/2020). [OIL MIST MINERAL] TWA: 5 mg/m ³ 10 hours. Form: Mist STEL: 10 mg/m ³ 15 minutes. Form: Mist		
Distillates (petroleum), hydrotreated heavy paraffinic			
Dec-1-ene, homopolymer, hydrogenated	None.		
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Section 8. Exposure controls/personal protection

[Mineral Oil, pure, highly and severely refined] TWA: 5 mg/m ³ 8 hours. Form: Inhalable fraction
TWA: 5 mg/m³ 8 hours. Form: Inhalable
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•
OSHA PEL (United States, 5/2018). [Oil
mist, mineral]
TWA: 5 mg/m ³ 8 hours.
NIOSH REL (United States, 10/2020). [OIL
MIST MINERAL]
TWA: 5 mg/m ³ 10 hours. Form: Mist
STEL: 10 mg/m ³ 15 minutes. Form: Mist
Lubricating oils (petroleum), hydrotreated spent ACGIH TLV (United States).
TWA: 5 mg/m ³ , (Inhalable Mist) 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
OSHA PEL (United States, 5/2018). [Oil
mist, mineral]
TWA: 5 mg/m ³ 8 hours.
NIOSH REL (United States, 10/2020). [OIL
MIST MINERAL]
TWA: 5 mg/m³ 10 hours. Form: Mist
STEL: 10 mg/m ³ 15 minutes. Form: Mist
Paraffin oils (petroleum), catalytic dewaxed heavy ACGIH TLV (United States, 1/2022).
[Mineral Oil, pure, highly and severely
refined]
TWA: 5 mg/m ³ 8 hours. Form: Inhalable
fraction
OSHA PEL (United States, 5/2018). [Oil
mist, mineral]
TWA: 5 mg/m ³ 8 hours.
NIOSH REL (United States, 10/2020). [OIL
MIST MINERAL]
TWA: 5 mg/m ³ 10 hours. Form: Mist
STEL: 10 mg/m ³ 15 minutes. Form: Mist
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc None. salts
Phenol, dodecyl-, branched None.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls Individual protection measur		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.
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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.

Section 8. Exposure controls/personal protection

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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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

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

Appearance

Physical state	:	Liquid.	iquid.						
Color	:	Purple. [Dark]							
Odor	:	Characteristic.							
Odor threshold	:	Not available.							
рН	:	Not available.							
Melting point/freezing point	1	Not available.							
Boiling point, initial boiling point, and boiling range	:	Not available.							
Flash point	:	Open cup: 243.33°C	ا°470) (470)	F) [(Clevelar	nd]			
Evaporation rate	1	Not available.							
Flammability	1	Not available.							
Lower and upper explosion	11	Not available.							
limit/flammability limit									
	:		Va	ipor	r Pressu	ure at 20°C	Va	oor press	sure at 50°C
limit/flammability limit	:	Ingredient name	Va mm I	<u> </u>	^r Pressı kPa	ure at 20°C	Vaj mm Hg	oor press kPa	ure at 50°C
limit/flammability limit	:	Ingredient name Distillates (petroleum), hydrotreated heavy paraffinic		<u> </u>	1		mm		
limit/flammability limit	:	Distillates (petroleum), hydrotreated heavy	mm I	<u> </u>	kPa	Method	mm		
limit/flammability limit Vapor pressure		Distillates (petroleum), hydrotreated heavy paraffinic	mm I	<u> </u>	kPa	Method	mm		
limit/flammability limit Vapor pressure Relative vapor density	:	Distillates (petroleum), hydrotreated heavy paraffinic Not available.	mm I	Hg	kPa	Method	mm		
limit/flammability limit Vapor pressure Relative vapor density Relative density	:	Distillates (petroleum), hydrotreated heavy paraffinic Not available. 0.8686	mm I	Re Not	kPa <0.011	Method	mm		

Section 9. Physical and chemical properties and safety characteristics

Partition coefficient: n- octanol/water	:	Not applicable.			
Auto-ignition temperature	:	Ingredient name	°C	°F	Method
		Dec-1-ene, homopolymer, hydrogenated	343 to 369	649.4 to 696.2	ASTM D 2159
Decomposition temperature	:	Not available.			
Viscosity	:	Kinematic (40°C (104°F)): 101.5	54 mm²/s (10	1.54 cSt)	
Flow time (ISO 2431)	:	Not available.			
Pour point	:	-45°C (-49°F)			
Particle characteristics					
Median particle size	:	Not applicable.			

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), hydrotreated heavy paraffinic	LC50 Inhalation Dusts and mists	Rat	5.7 mg/l	4 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Distillates (petroleum), hydrotreated heavy paraffinic	LC50 Inhalation Dusts and mists	Rat	5.7 mg/l	4 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Dec-1-ene, homopolymer, hydrogenated	LC50 Inhalation Dusts and mists	Rat	>5.2 mg/l	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Distillates (petroleum), solvent-dewaxed heavy paraffinic	LC50 Inhalation Dusts and mists	Rat	>5.53 mg/l	4 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Lubricating oils (petroleum), hydrotreated spent	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Distillates (petroleum), solvent-dewaxed light paraffinic	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-

Section 11. Toxicological information

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	LD50 Oral	Rat	>5000 mg/kg	-
Paraffin oils (petroleum), catalytic dewaxed heavy	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	LC50 Inhalation Vapor	Rat - Male	>2 mg/l	1 hours
	LD50 Dermal	Rabbit - Male, Female	>3160 mg/kg	-
	LD50 Oral	Rat	2600 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	Eyes - Severe irritant	Rabbit	-	504 hours	-
	Skin - Irritant	Guinea pig	-	4 hours	-

Sensitization

Product/ingredient name	Route of exposure	Species	Result
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	skin	Guinea pig	Not sensitizing

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	-	-	-	Rat - Male, Female	Oral	-

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Name	Result
Dec-1-ene, homopolymer, hydrogenated	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.					
Potential acute health effects	2					
Eye contact	: No known significant effects or critical hazards.					
Inhalation	: No known significant effects or critical hazards.					
Skin contact	: No known significant effects or critical hazards.					
Ingestion	: No known significant effects or critical hazards.					
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Section 11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure Short term exposure **Potential immediate** : Not available. effects **Potential delayed effects** : Not available. Long term exposure **Potential immediate** : Not available. effects Potential delayed effects : Not available. Potential chronic health effects Not available. General : No known significant effects or critical hazards.

Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/ I)
VIRALEC ULTRA SAE 15W-40	282991.7	3005.6	N/A	54.4	N/A
Distillates (petroleum), hydrotreated heavy paraffinic	N/A	2500	N/A	N/A	5.7
Distillates (petroleum), hydrotreated heavy paraffinic	N/A	2500	N/A	N/A	5.7
Dec-1-ene, homopolymer, hydrogenated	N/A	2500	N/A	N/A	N/A
Distillates (petroleum), solvent-dewaxed heavy paraffinic	N/A	2500	N/A	N/A	N/A
Distillates (petroleum), solvent-dewaxed light paraffinic	N/A	2500	N/A	N/A	N/A
Paraffin oils (petroleum), catalytic dewaxed heavy Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	N/A 2600	2500 2500	N/A N/A	N/A 0.5	N/A N/A

Section 12. Ecological information

Toxicity

Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
Distillates (petroleum), hydrotreated heavy paraffinic	Acute EC50 >100 mg/l	Algae	72 hours
	Acute EC50 >100 mg/l	Daphnia	48 hours
	Acute LC50 >100 mg/l	Fish	96 hours
	Chronic NOEL >1 mg/l	Daphnia	21 days
Distillates (petroleum), hydrotreated heavy paraffinic	Acute EC50 >100 mg/l	Daphnia	48 hours
	Acute IC50 >100 mg/l	Algae	72 hours
	Acute LC50 >100 mg/l	Fish	96 hours
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Acute EC50 >100 mg/l	Algae	72 hours
	Acute EC50 >100 mg/l	Daphnia	48 hours
	Acute LC50 >100 mg/l	Fish	96 hours
	Chronic NOEL >1 mg/l	Daphnia	21 days
Distillates (petroleum), solvent-dewaxed light paraffinic	Acute LC50 4.5 mg/l	Fish	96 hours
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	LC50 4.5 mg/l	Fish	96 hours
Phenol, dodecyl-, branched	EC50 0.037 mg/l	Daphnia	2 days
	LC50 40 mg/l	Fish	4 days
	NOEC 0.0037 mg/l	Daphnia	21 days

Persistence and degradability

					1
Product/ingredient name	Test	Result		Dose	Inoculum
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	OECD 301B Ready Biodegradability - CO ₂ Evolution Test	1.5 % - Not readily -	28 days	-	-
	OECD 301B Ready Biodegradability - CO ₂ Evolution Test	1.5 % - Not readily -	28 days	-	-
Phenol, dodecyl-, branched	- OECD 301B Ready Biodegradability - CO ₂ Evolution Test	56 % - Not readily - 25 % - 28 days	10 days	-	-
Product/ingredient name	Aquatic half-life		Photolysis		Biodegradability
Distillates (petroleum), hydrotreated heavy paraffinic Distillates (petroleum), hydrotreated heavy paraffinic	-		-		Inherent Not readily
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts Phenol, dodecyl-, branched	-		-		Not readily Not readily

Bioaccumulative potential

Section 12. Ecological information

Product/ingredient name	LogPow	BCF	Potential
Distillates (petroleum), hydrotreated heavy paraffinic	>6	-	High
Distillates (petroleum), hydrotreated heavy paraffinic	>6	-	High
Dec-1-ene, homopolymer, hydrogenated	>6.5	-	High
Distillates (petroleum), solvent-dewaxed heavy paraffinic	2 to 6	-	High
Phenol, dodecyl-, branched	6.1	1601	High

Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods	: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains
	and sewers.

Section 14. Transport information

DOT Classification	TDG Classification	IMDG	ΙΑΤΑ
ot regulated.	Not regulated.	Not regulated.	Not regulated.

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	: 🗚 SCA 8(a) PAIR: diphenylamine; naphthalene
	TSCA 8(a) CDR Exempt/Partial exemption: Not determined
	Clean Water Act (CWA) 307 : Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts; Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts; benzene; toluene
	Clean Water Act (CWA) 311: benzene; toluene; ethylenediamine; hydrogen sulphide
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Listed

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Section 15. Regulatory information

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

		SARA 302 TPQ		SARA 304 RQ		
Name	%	EHS	(lbs)	(gallons)	(lbs)	(gallons)
ethylenediamine hydrogen sulphide vinyl acetate	<0.1 <0.001 <0.1	Yes. Yes. Yes.	10000 500 1000	1337.1 - 129	5000 100 5000	668.5 - 644.8

SARA 304 RQ

: 20120724.3 lbs / 9134808.9 kg [2778219.2 gal / 10516703.7 L]

SARA 311/312

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: Not applicable.

Composition/information on ingredients

Name	%	Classification
Distillates (petroleum), hydrotreated heavy paraffinic	≥25 - ≤50	ASPIRATION HAZARD - Category 1
Dec-1-ene, homopolymer, hydrogenated	≥10 - ≤15	ASPIRATION HAZARD - Category 1
Distillates (petroleum), solvent- dewaxed light paraffinic	≤2.8	ASPIRATION HAZARD - Category 1
Phosphorodithioic acid, mixed O, O-bis(sec-Bu and isooctyl) esters, zinc salts	≤1.6	ACUTE TOXICITY (inhalation) - Category 2 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A

<u>SARA 313</u>

Product name	CAS number	%
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	113706-15-3	≤1.6
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	113706-15-3	≤1.6

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	: None of the components are listed.
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
Colifornia Dron. CE	

California Prop. 65

▲ WARNING: This product can expose you to chemicals including Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov. Information provided is based on industrial use and may not be relevant to consumer applications.

Section 15. Regulatory information

Ingredient name	Concentration (%)	No significant risk level	Maximum acceptable dosage level
Benzene	0 - 0.014614	Yes.	Yes.
Toluene	0 - 0.0146	-	Yes.

International lists		
National inventory		
Australia	: All components are listed or exempted.	
Canada	: All components are listed or exempted.	
China	: Not determined.	
Eurasian Economic Union	: Russian Federation inventory: Not determined.	
New Zealand	: All components are listed or exempted.	
Philippines	: Not determined.	
Republic of Korea	: All components are listed or exempted.	
Taiwan	: Not determined.	
Thailand	: Not determined.	
Turkey	: Not determined.	
United States	: All components are active or exempted.	
Viet Nam	: Not determined.	
Section 16 Other i	nformation	

Section 16. Other information

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

Clas	sification	Justification
AQUATIC HAZARD (ACUT AQUATIC HAZARD (LONG		Calculation method Calculation method
History		
Date of issue/Date of revision	: 07/31/2023	
Date of previous issue	: 06/02/2023	
Version	: 9.01	
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classificat IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition MARPOL = International Convention for the Prevent	coefficient
Date of issue/Date of revision	: 07/31/2023 Date of previous issue : 06/02/2023	3 Version : 9.01 13/14

Section 16. Other information

as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group UN = United Nations

V 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.