SAFETY DATA SHEET



HPS SAE 10W-40

Section 1. Identifi	cation
GHS product identifier	: HPS SAE 10W-40
Product code	: 301901175008
Other means of	: Not available.
identification	
Product type	: Liquid.
Relevant identified uses of t	the substance or mixture and uses advised against
Identified uses	
Consumer products: Lubricat Industrial applications: Lubric	
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	s 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	: AQUATIC HAZARD (ACUTE) - Category 3 AQUATIC HAZARD (LONG-TERM) - Category 3
	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 6.9%
GHS label elements	
Signal word	: No signal word.
Hazard statements	: Harmful to aquatic life with long lasting effects.
Precautionary statements	
General	: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention	Avoid release to the environment.
Response	: Not applicable.
Storage	: Not applicable.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture Other means of identification

- : Mixture
- : Not available.

Ingredient name	%	CAS number
Sistillates (petroleum), hydrotreated heavy paraffinic	≥50 - ≤75	64742-54-7
Distillates (petroleum), solvent-dewaxed heavy paraffinic	≤10	64742-65-0
Distillates (petroleum), solvent-dewaxed light paraffinic	≤10	64742-56-9
Distillates (petroleum), hydrotreated light paraffinic	≤10	64742-55-8
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	≤5	72623-87-1
Distillates (petroleum), hydrotreated middle	≤3	64742-46-7
2,6-di-tert-butylphenol	≤0.3	128-39-2
Phenol, dodecyl-, branched	≤0.1	121158-58-5

The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346

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 necessa	r <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 Potential acute health	effects, acute and delayed effects
Eye contact	No known significant effects or critical hazards.
Inhalation	No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/	<u>symptoms</u>
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
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	iv	e 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

Section 7. Handling and storage

Precautions for safe handling	
Protective measures	: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. 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

Distillates (petroleum), hydrotreated 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 OSHA PEL (United States, 5/2018). [Oil mist, mineral] TWA: 5 mg/m³ 8 hours. ACGIH TLV (United States, 1/2022). Distillates (petroleum), solvent-dewaxed heavy paraffinic OSHA PEL (United States, 1/2022). Distillates (petroleum), solvent-dewaxed heavy paraffinic TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Inhalable fraction NIOSH REL (United States, 1/2022). [Mineral Oil, pure, highly and severely refined] 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. 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: 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	ngredient name	Exposure limits
Distillates (petroleum), solvent-dewaxed light paraffinic	Distillates (petroleum), hydrotreated 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 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, 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: Inhalable fraction
	Jistillates (petroleum), solvent-dewaxed light paraffinic	

Section 8. Exposure controls/personal protection

	OSHA PEL (United States, 5/2018). [Oil
	mist, mineral]
	TWA: 5 mg/m ³ 8 hours.
	ACGIH TLV (United States, 1/2022).
	[Mineral Oil, pure, highly and severely
	refined]
	TWA: 5 mg/m ³ 8 hours. Form: Inhalable
	fraction
	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 light paraffinic	OSHA PEL (United States, 5/2018). [Oil
	mist, mineral]
	TWA: 5 mg/m ³ 8 hours.
	ACGIH TLV (United States, 1/2022).
	[Mineral Oil, pure, highly and severely
	refined]
	TWA: 5 mg/m ³ 8 hours. Form: Inhalable
	fraction
	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), C20-50, hydrotreated neutral oil-based	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 middle	ACGIH TLV (United States).
	As total hydrocarbon vapor: 200 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
2,6-di-tert-butylphenol	None.
Phenol, dodecyl-, branched	None.
Biological exposure indices	1

None known.

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 measure	<u>es</u>	
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

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shields.

the assessment indicates a higher degree of protection: safety glasses with side-

Section 8. Exposure controls/personal protection

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.
Color	: Purple. [Dark]
Odor	: Characteristic.
Odor threshold	: Not available.
рН	: Not available.
Melting point/freezing point	: Not available.
Boiling point, initial boiling point, and boiling range	: Not available.
Flash point	: Closed cup: 172.67°C (342.8°F) [Pensky-Martens]
Evaporation rate	: Not available.
Flammability	: Not available.
Lower and upper explosion limit/flammability limit	: Not available.

Vapor pressure

	Vapor Pressure at 20°C			Vapor pressure at 50°C			
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method	
JAYFLEX DIDP	0.08	0.011					
Distillates (petroleum), hydrotreated heavy paraffinic	<0.08	<0.011	ASTM D 5191				
Distillates (petroleum), solvent-dewaxed heavy paraffinic	<0.08	<0.011	ASTM D 5191				
Distillates (petroleum), solvent-dewaxed light paraffinic	<0.08	<0.011	ASTM D 5191				
Distillates (petroleum), hydrotreated light paraffinic	<0.08	<0.011	ASTM D 5191				
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil- based	<0.08	<0.011	ASTM D 5191				
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Section 9. Physical and chemical properties and safety characteristics

						aroty				
	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil- based	<0.08		<0.011	ASTM D 519	1				
	Distillates (petroleum), hydrotreated heavy naphthenic	<0.08	•	<0.011	ASTM D 519	1				
	naphthalene	0.054	(0.0072	OECD 104					
	Solvent naphtha (petroleum), heavy arom.	0.02	(0.0027						
	2,6-di-tert-butylphenol	0.01	(0.0013	OECD 104					
	bis(nonylphenyl)amine	<0.01	-	<0.0013	EU A.4	0.0019	9	0.00025	EU A.4	
	zinc O,O,O',O'-tetrakis (1,3-dimethylbutyl) bis (phosphorodithioate)	0.00008	82 (0.000011						
	Phosphorodithioic acid, mixed O,O-bis (1,3-dimethylbutyl and iso-Pr) esters, zinc salts	0.0000	52 (0.0000069	EU A.4	0.0003	3	0.00004	EU A.4	
	Dec-1-ene, homopolymer, hydrogenated	0	(D	ASTM E 1194-87					
	4,4'-methylene bis (dibutyldithiocarbamate)	<0	4	<0						
Relative vapor density	Not available.									
Relative density	0.8723									
Solubility(ies)	Media		Res	sult						
	cold water hot water			soluble soluble						
Solubility in water	Not available.									
Partition coefficient: n- octanol/water	Not applicable.									
Auto-ignition temperature	Ingredient name			°C	°F		Me	thod		
	Solvent naphtha (petroled arom.	um), hea	vy	220 to 25	50 428 te	o 482	AST	M E 659		
	Distillates (petroleum), hy middle	/drotreate	ed	225	437					
	Dec-1-ene, homopolymer hydrogenated	r,		343 to 36	649.4	to 696.2	AST	M D 2159		
	2,6-di-tert-butylphenol			375	707					
	Phenol, dodecyl-, branch	ed		379 to 38	39 714.2	to 732.2				
	bis(nonylphenyl)amine			440	824		EU	A.15		
	JAYFLEX DIDP			>400	>752					
	naphthalene			526 to 58	978.8	to 1088.6	DIN	51794		
	diphenylamine			634	1173	2				
Decomposition temperature	Not available.			•						
Viscosity	Kinematic (40°C (104	4°F)): 7	70.7	1 mm²/s	(70.71 cSt)				
Flow time (ISO 2431)	Not available.									
Pour point	-48°C (-54.4°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
5	LD50 Dermal	Rabbit	>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	-
Distillates (petroleum), solvent-dewaxed light paraffinic	LD50 Dermal	Rabbit	>5000 mg/kg	-
•	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Distillates (petroleum), hydrotreated light 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), C20-50, hydrotreated neutral oil-based	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Distillates (petroleum), hydrotreated middle	LD50 Dermal	Rabbit	>2000 mg/kg	-
-	LD50 Oral	Rat	>5000 mg/kg	-
2,6-di-tert-butylphenol	LD50 Dermal	Rabbit	>10 g/kg	-
-	LD50 Oral	Rat	1320 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
2,6-di-tert-butylphenol	Skin - Moderate irritant	Rat	-	0.5 MI	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Section 11. Toxicological information

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Name	Result
Distillates (petroleum), solvent-dewaxed light paraffinic	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light paraffinic	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated middle	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure	1	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	:	No known significant effects or critical hazards.
Ingestion	:	No known significant effects or critical hazards.
Symptoms related to the phy	eir	cal, chemical and toxicological characteristics
Eye contact	÷	No specific data.
Inhalation	1	No specific data.
Skin contact	:	No specific data.
Ingestion	1	No specific data.
Delaved and immediate effec	ts	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	: 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

Section 11. Toxicological information

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/
			,		I)
Distillates (petroleum), hydrotreated heavy paraffinic	N/A	2500	N/A	N/A	5.7
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
Distillates (petroleum), hydrotreated light paraffinic	N/A	2500	N/A	N/A	N/A
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	N/A	2500	N/A	N/A	N/A
Distillates (petroleum), hydrotreated middle	N/A	2500	N/A	N/A	N/A
2,6-di-tert-butylphenol	1320	N/A	N/A	N/A	N/A

Section 12. Ecological information

<u>Toxicity</u>			
Product/ingredient name	Result	Species	Exposure
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), hydrotreated light 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
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	Acute EC50 >100 mg/l	Algae	72 hours
	Acute EC50 >100 mg/l	Crustaceans	48 hours
	Acute LC50 >100 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

Product/ingredient name	Test	Result	Dose	Inoculum
Phenol, dodecyl-, branched	- OECD 301B Ready Biodegradability - CO ₂ Evolution Test	56 % - Not readily - 10 days 25 % - 28 days	-	-

Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Distillates (petroleum),	-	-	Not readily
hydrotreated heavy paraffinic			,
Distillates (petroleum), hydrotreated light paraffinic	-	-	Inherent
Lubricating oils (petroleum),	-	-	Inherent
C20-50, hydrotreated neutral			
oil-based Phenol, dodecyl-, branched	-	-	Not readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
▶ istillates (petroleum), hydrotreated heavy paraffinic	>6	-	high
Distillates (petroleum), solvent-dewaxed heavy paraffinic	2 to 6	-	high
Distillates (petroleum), hydrotreated light paraffinic	>6	-	high
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	>6	-	high
2,6-di-tert-butylphenol Phenol, dodecyl-, branched	4.5 6.1	- 1601	high high

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

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

Section 13. Disposal considerations

Disposal methods	: The generation of waste should be avoided or minimized wherever possible. Disposal
Disposal methods	0
	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
UN number	Not 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.

Section 14. Transport information

Transport in bulk according : Not available. to IMO instruments

Section 15. Regulatory information

Ŭ	
U.S. Federal regulations	: TSCA 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(1,3-dimethylbutyl and iso-Pr) esters, zinc salts; zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis (phosphorodithioate)
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Not listed
Clean Air Act Section 602 Class I Substances	: Not listed
Clean Air Act Section 602 Class II Substances	: Not listed
DEA List I Chemicals (Precursor Chemicals)	: Not listed
DEA List II Chemicals (Essential Chemicals)	: Not listed
SARA 302/304	
Composition/information	on ingredients
No products were found.	
SARA 304 RQ	: Not applicable.

SARA 311/312

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Classification

: Not applicable.

Composition/information on ingredients

Name	%	Classification
Distillates (petroleum), solvent- dewaxed light paraffinic	≤10	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light paraffinic	≤10	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated middle	≤3	FLAMMABLE LIQUIDS - Category 4 ASPIRATION HAZARD - Category 1

State regulations

Massachusetts	: None of the components are listed.		
New York	: None of the components are listed.		
New Jersey	: None of the components are listed.		
Pennsylvania	: None of the components are listed.		
<u>California Prop. 65</u>			
This product is not known to	contain California Prop 65 substances ≥1 ppm		
International lists			
National inventory			
Australia	: 🕅 components are listed or exempted.		
Canada	: 🕅 components are listed or exempted.		
China	: 🕅 components are listed or exempted.		
Eurasian Economic Union	: Russian Federation inventory: Not determined.		
New Zealand	: At least one component is not listed.		
Philippines	: 🕅 components are listed or exempted.		
Date of issue/Date of revision	: 12/14/2022 Date of previous issue : 11/17/2022 Version : 9.01 12/13		

Section 15. Regulatory information

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Republic of Korea	: 🕅 components are listed or exempted.
Taiwan	: 🕅 components are listed or exempted.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: 🗚 components are active or exempted.
Viet Nam	: Not determined.

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 (ACUTE) - Category 3 AQUATIC HAZARD (LONG-TERM) - Category 3		Calculation method Calculation method
History		
Date of issue/Date of revision	: 12/14/2022	
Date of previous issue	: 11/17/2022	
Version	: 9.01	
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coe MARPOL = International Convention for the Preventi as modified by the Protocol of 1978. ("Marpol" = mari N/A = Not available SGG = Segregation Group UN = United Nations	efficient on of Pollution From Ships, 1973

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.