

The Toro Company

Chemwatch: 5198-38 Version No: 3.1.1.1

Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

Chemwatch Hazard Alert Code: 2

Issue Date: 23/12/2015 Print Date: 05/10/2018 S GHS USA EN

SECTION 1 IDENTIFICATION

Product Identifier

Product name	Toro Hypr-Oil 500
Synonyms	Not Available
Other means of identification	Not Available

Recommended use of the chemical and restrictions on use

Relevant identified uses

Automotive Lubricant

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Registered company name	The Toro Company
Address	8111 Lyndale Avenue South, Bloomington MN 55420 United States
Telephone	+1-952-888-8801
Fax	+1-952-887-8258
Website	www.toro.com
Email	HealthAndSafety@toro.com

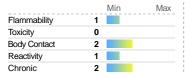
Emergency phone number

Association / Organisation	CHEMTEL
Emergency telephone numbers	1-800-255-3924
Other emergency telephone numbers	+1-813-248-0585

SECTION 2 HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

CHEMWATCH HAZARD RATINGS



NFPA 704 diamond



Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

Classification

Eye Irritation Category 2B, Reproductive Toxicity Category 2

0 = Minimum1 = Low 2 = Moderate

3 = High 4 = Extreme

Label elements

Hazard pictogram(s)



SIGNAL WORD WARNING

Hazard statement(s)

······································		
H320	Causes eye irritation.	
H361	Suspected of damaging fertility or the unborn child.	

Hazard(s) not otherwise specified

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Not Applicable

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.	
P281	se personal protective equipment as required.	
P264	Wash all exposed external body areas thoroughly after handling.	

Precautionary statement(s) Response

P308+P313	IF exposed or concerned: Get medical advice/attention.			
P305+P351+P338	IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.			
P337+P313	If eye irritation persists: Get medical advice/attention.			

Precautionary statement(s) Storage

P405 Store locked up.

Precautionary statement(s) Disposal

P501 Dispose of contents/container in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
	5-10	proprietary engine oil additive
64742-65-0.	1-5	paraffinic distillate, heavy, solvent-dewaxed (severe)
64742-55-8.	1-5	paraffinic distillate, light, hydrotreated (severe)
64742-54-7.	1-5	paraffinic distillate, heavy, hydrotreated (severe)
	1-5	automotive gear oil additive, mixture
	1-5	severely treated base oil
113706-15-3	1-5	zinc O,O-bis(sec-butyl & isooctyl)dithiophosphate

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 FIRST-AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: • Wash out immediately with fresh running water. • Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. • Seek medical attention without delay; if pain persists or recurs seek medical attention. • Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	 If furnes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	 If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice.

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIRE-FIGHTING MEASURES

Extinguishing media

- ► Foam.
- Dry chemical powder.
- ► BCF (where regulations permit).

- Carbon dioxide.
- Water spray or fog Large fires only.

Fire/Explosion Hazard

Special hazards arising from the substrate or mixture

Fire Incompatibility ▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Special protective equipment and precautions for fire-fighters

▶ Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Fire Fighting

- ▶ Use water delivered as a fine spray to control fire and cool adjacent area
 - Avoid spraying water onto liquid pools.

 - ▶ DO NOT approach containers suspected to be hot

Combustible.

- ▶ Slight fire hazard when exposed to heat or flame.
- ▶ Heating may cause expansion or decomposition leading to violent rupture of containers.
- On combustion, may emit toxic furnes of carbon monoxide (CO).
- May emit acrid smoke.
- Mists containing combustible materials may be explosive.

Combustion products include:

carbon dioxide (CO2)

sulfur oxides (SOx)

other pyrolysis products typical of burning organic material.

May emit poisonous fumes May emit corrosive fumes.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	 Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up.
Major Spills	Moderate hazard. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. No smoking, naked lights or ignition sources.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling				
Safe handling	 Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. Avoid smoking, naked lights or ignition sources. 			
Other information	 Store in original containers. Keep containers securely sealed. No smoking, naked lights or ignition sources. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. 			

Conditions for safe storage, including any incompatibilities

Suitable container	 Metal can or drum Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility • Avoid reaction with oxidising agents	

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

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INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US NIOSH Recommended Exposure Limits (RELs)	paraffinic distillate, heavy, solvent- dewaxed (severe)	Heavy mineral oil mist, Paraffin oil mist, White mineral oil mist	5 mg/m3	10 mg/m3	Not Available	Not Available
US ACGIH Threshold Limit Values (TLV)	paraffinic distillate, heavy, solvent- dewaxed (severe)	Mineral oil, excluding metal working fluids - Pure, highly and severely refined	5 mg/m3	Not Available	Not Available	TLV® Basis: URT irr
US OSHA Permissible Exposure Levels (PELs) - Table Z1	paraffinic distillate, heavy, solvent- dewaxed (severe)	Oil mist, mineral	5 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	paraffinic distillate, light, hydrotreated (severe)	Heavy mineral oil mist, Paraffin oil mist, White mineral oil mist	5 mg/m3	10 mg/m3	Not Available	Not Available
US ACGIH Threshold Limit Values (TLV)	paraffinic distillate, light, hydrotreated (severe)	Mineral oil, excluding metal working fluids - Pure, highly and severely refined	5 mg/m3	Not Available	Not Available	TLV® Basis: URT irr
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US OSHA Permissible Exposure Levels (PELs) - Table Z1	paraffinic distillate, heavy, hydrotreated (severe)	Oil mist, mineral	5 mg/m3	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
paraffinic distillate, heavy, solvent- dewaxed (severe)	Pump oil; (petroleum distillates, solvent de-waxed heavy paraffinic	140 mg/m3	1,500 mg/m3	8,900 mg/m3

Ingredient	Original IDLH	Revised IDLH
paraffinic distillate, heavy, solvent- dewaxed (severe)	2,500 mg/m3	Not Available
paraffinic distillate, light, hydrotreated (severe)	2,500 mg/m3	Not Available
paraffinic distillate, heavy, hydrotreated (severe)	2,500 mg/m3	Not Available
zinc O,O-bis(sec-butyl & isooctyl)dithiophosphate	Not Available	Not Available

Exposure controls

Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.

Personal protection







Eye and face protection

- ► Safety glasses with side shields.
- ▶ Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available.

Skin protection

See Hand protection below

- ▶ Wear chemical protective gloves, e.g. PVC.
- ► Wear safety footwear or safety gumboots, e.g. Rubber

Hands/feet protection

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly.

Body protection

See Other protection below

Other protection

- ▶ Overalls.
 - P.V.C. apron.
 - Barrier cream.Skin cleansing cream.
 - ► Eye wash unit.

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Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	A-AUS P2	-	A-PAPR-AUS / Class 1 P2
up to 50 x ES	-	A-AUS / Class 1 P2	-
up to 100 x ES	-	A-2 P2	A-PAPR-2 P2 ^

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

- Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear amber liquid with characteristic odour, does not mix with water.		
Physical state	Liquid	Relative density (Water = 1)	0.9
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	18.6 @ 100 deg C
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	221	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution (1%)	Not Applicable
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.
Ingestion	The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.
Skin Contact	The material may accentuate any pre-existing dermatitis condition Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons.
Eye	There is some evidence to suggest that this material can cause eye irritation and damage in some persons.

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Chronic

Ample evidence from experiments exists that there is a suspicion this material directly reduces fertility.

Based on experience with animal studies, exposure to the material may result in toxic effects to the development of the foetus, at levels which do not cause significant toxic effects to the mother.

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

	TOXICITY	IRRITATION
Toro Hypr-Oil 500	Dermal (None) LD50: 2448 mg/kg ^[2]	Not Available
	Inhalation (None) LC50: 9 mg/l ^[2]	
	TOXICITY	IRRITATION
paraffinic distillate, heavy,	Dermal (rabbit) LD50: >2000 mg/kg ^[1]	Not Available
solvent-dewaxed (severe)	Inhalation (rat) LC50: >3.9 mg/l4 h ^[1]	
	Oral (rat) LD50: >2000 mg/kg ^[1]	
	TOXICITY	IRRITATION
paraffinic distillate, light,	Dermal (rabbit) LD50: >2000 mg/kg ^[1]	Not Available
hydrotreated (severe)	Inhalation (rat) LC50: >3.9 mg/l4 h ^[1]	
	Oral (rat) LD50: >2000 mg/kg ^[1]	
	TOXICITY	IRRITATION
paraffinic distillate, heavy,	Dermal (rabbit) LD50: >2000 mg/kg ^[1]	Not Available
hydrotreated (severe)	Inhalation (rat) LC50: >3.9 mg/l4 h ^[1]	
	Oral (rat) LD50: >2000 mg/kg ^[1]	
zinc O,O-bis(sec-butyl &	TOXICITY	IRRITATION
isooctyl)dithiophosphate	Not Available	Not Available

Legend:

1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

PARAFFINIC DISTILLATE, LIGHT, HYDROTREATED (SEVERE)

* Q8 MSDS

ZINC O,O-BIS(SEC-BUTYL & ISOOCTYL)DITHIOPHOSPHATE

PARAFFINIC DISTILLATE,

(SEVERE) & PARAFFINIC

PARAFFINIC DISTILLATE,

HEAVY, HYDROTREATED

DISTILLATE, LIGHT,

(SEVERE)

HEAVY, SOLVENT-DEWAXED

HYDROTREATED (SEVERE) &

The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

Dithiophosphate alkyl esters is corrosive and toxic to the tissues on skin or oral exposure depending on its concentration. Symptoms included diarrhoea, skin and gastrointestinal irritation, lethargy, reduced food intake, staining about the nose and eye; occasionally, there was drooping of the eyelid, hair standing up, inco-ordination and salivation. Toxicity is reduced following inhalation (due to vapour pressure and high viscosity). It may produce reproductive, developmental and genetic toxicity on experimental animals, but no substantive data is available to establish effect on humans.

The materials included in the Lubricating Base Oils category are related from both process and physical-chemical perspectives; The potential toxicity of a specific distillate base oil is inversely related to the severity or extent of processing the oil has undergone, since:

- The adverse effects of these materials are associated with undesirable components, and
- The levels of the undesirable components are inversely related to the degree of processing;
- Distillate base oils receiving the same degree or extent of processing will have similar toxicities;
- The potential toxicity of residual base oils is independent of the degree of processing the oil receives.

The reproductive and developmental toxicity of the distillate base oils is inversely related to the degree of processing.

Unrefined & mildly refined distillate base oils contain the highest levels of undesirable components, have the largest variation of hydrocarbon molecules and have shown the highest potential cancer-causing and mutation-causing activities. Highly and severely refined distillate base oils are produced from unrefined and mildly refined oils by removing or transforming undesirable components. In comparison to unrefined and mildly refined base oils, the highly and severely refined distillate base oils have a smaller range of hydrocarbon molecules and have demonstrated very low mammalian toxicity. Testing of residual oils for mutation-causing and cancer-causing potential has shown negative results, supporting the belief that these materials lack biologically active components or the components are largely non-bioavailable due to their molecular size.

For highly and severely refined distillate base oils:

In animal studies, the acute, oral, semilethal dose is >5g/kg body weight and the semilethal dose by skin contact is >2g/kg body weight. The semilethal concentration for inhalation is 2.18 to >4 mg/L. The materials have varied from "non-irritating" to "moderately irritating" when tested for skin and eye irritation. Testing for sensitisation has been negative. The effects of repeated exposure vary by species; in animals, effects to the testes and lung have been observed, as well as the formation of granulomas. In animals, these substances have not been found to cause reproductive toxicity or significant increases in birth defects.

The substance is classified by IARC as Group 3:

NOT classifiable as to its carcinogenicity to humans.

Evidence of carcinogenicity may be inadequate or limited in animal testing.

PARAFFINIC DISTILLATE, HEAVY, SOLVENT-DEWAXED (SEVERE) & PARAFFINIC DISTILLATE, LIGHT, HYDROTREATED (SECRE) & ZINC O,O-BIS(SEC-BUTYL & ISOOCTYL)DITHIOPHOSPHATE

No significant acute toxicological data identified in literature search.

Acute Toxicity	×	Carcinogenicity	0
Skin Irritation/Corrosion	0	Reproductivity	✓

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Serious Eye Damage/Irritation	✓	STOT - Single Exposure	0
Respiratory or Skin sensitisation	0	STOT - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	0
		9	Data available but does not fill the criteria for classification

O - Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Toro Hypr-Oil 500	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURC
	Not Available	Not Available	Not Available	Not Available	Not Available
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURC
paraffinic distillate, heavy,	EC50	48	Crustacea	>1000mg/L	1
solvent-dewaxed (severe)	EC50	96	Algae or other aquatic plants	>1000mg/L	1
	NOEC	504	Crustacea	>1mg/L	1
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURC
paraffinic distillate, light, hydrotreated (severe)	EC50	48	Crustacea	>1000mg/L	1
nydrotreated (severe)	NOEC	504	Crustacea	>1mg/L	1
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURC
paraffinic distillate, heavy,	EC50	48	Crustacea	>1000mg/L	1
hydrotreated (severe)	EC50	96	Algae or other aquatic plants	>1000mg/L	1
	NOEC	504	Crustacea	>1mg/L	1
zinc O,O-bis(sec-butyl & isooctyl)dithiophosphate	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURC
	Not Available	Not Available	Not Available	Not Available	Not Available

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

DO NOT discharge into sewer or waterways

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air	
	No Data available for all ingredients	No Data available for all ingredients	

Bioaccumulative potential

Ingredient	Bioaccumulation
	No Data available for all ingredients

Mobility in soil

Ingredient	Mobility
	No Data available for all ingredients

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

- ▶ DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- ▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- ▶ Where in doubt contact the responsible authority. Product / Packaging disposal
 - Recycle wherever possible or consult manufacturer for recycling options.
 - Consult State Land Waste Authority for disposal.
 - Bury or incinerate residue at an approved site.
 - ▶ Recycle containers if possible, or dispose of in an authorised landfill.

SECTION 14 TRANSPORT INFORMATION

Labels Required

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Marine Pollutant

NO

Land transport (DOT): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

PARAFFINIC DISTILLATE, HEAVY, SOLVENT-DEWAXED (SEVERE)(64742-65-0.) IS FOUND	ON THE FOLLOWING REGULATORY LISTS
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC	US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants
Monographs	US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air
US - Alaska Limits for Air Contaminants	Contaminants
US - California Permissible Exposure Limits for Chemical Contaminants	US - Washington Permissible exposure limits of air contaminants
US - Hawaii Air Contaminant Limits	US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
US - Idaho - Limits for Air Contaminants	US ACGIH Threshold Limit Values (TLV)
US - Michigan Exposure Limits for Air Contaminants	US ACGIH Threshold Limit Values (TLV) - Carcinogens
US - Minnesota Permissible Exposure Limits (PELs)	US NIOSH Recommended Exposure Limits (RELs)
US - Oregon Permissible Exposure Limits (Z-1)	US OSHA Permissible Exposure Levels (PELs) - Table Z1
US - Pennsylvania - Hazardous Substance List	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	US TSCA Chemical Substance Inventory - Interim List of Active Substances

PARAFFINIC DISTILLATE, LIGHT, HYDROTREATED (SEVERE)(64742-55-8.) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC	US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants
Monographs	US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air
US - Alaska Limits for Air Contaminants	Contaminants
US - California Permissible Exposure Limits for Chemical Contaminants	US - Washington Permissible exposure limits of air contaminants
US - Hawaii Air Contaminant Limits	US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
US - Idaho - Limits for Air Contaminants	US ACGIH Threshold Limit Values (TLV)
US - Massachusetts - Right To Know Listed Chemicals	US ACGIH Threshold Limit Values (TLV) - Carcinogens
US - Michigan Exposure Limits for Air Contaminants	US NIOSH Recommended Exposure Limits (RELs)
US - Minnesota Permissible Exposure Limits (PELs)	US OSHA Permissible Exposure Levels (PELs) - Table Z1
US - Oregon Permissible Exposure Limits (Z-1)	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US - Pennsylvania - Hazardous Substance List	US TSCA Chemical Substance Inventory - Interim List of Active Substances
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	

PARAFFINIC DISTILLATE, HEAVY, HYDROTREATED (SEVERE)(64742-54-7.) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC	US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants
Monographs	US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air
US - Alaska Limits for Air Contaminants	Contaminants
US - California Permissible Exposure Limits for Chemical Contaminants	US - Washington Permissible exposure limits of air contaminants
US - Hawaii Air Contaminant Limits	US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
US - Idaho - Limits for Air Contaminants	US ACGIH Threshold Limit Values (TLV)
US - Michigan Exposure Limits for Air Contaminants	US ACGIH Threshold Limit Values (TLV) - Carcinogens
US - Minnesota Permissible Exposure Limits (PELs)	US NIOSH Recommended Exposure Limits (RELs)
US - Oregon Permissible Exposure Limits (Z-1)	US OSHA Permissible Exposure Levels (PELs) - Table Z1
US - Pennsylvania - Hazardous Substance List	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	US TSCA Chemical Substance Inventory - Interim List of Active Substances

ZINC O,O-BIS(SEC-BUTYL & ISOOCTYL)DITHIOPHOSPHATE(113706-15-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air	US EPCRA Section 313 Chemical List
Contaminants	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US CWA (Clean Water Act) - Priority Pollutants	US TSCA Chemical Substance Inventory - Interim List of Active Substances
LIS CWA (Clean Water Act) - Toxic Pollutants	

US EPA Carcinogens Listing

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SECTION 311/312 HAZARD CATEGORIES

No
No

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Organic Peroxide Self-reactive In contact with water emits flammable gas Combustible Dust No)
In contact with water emits flammable gas Combustible Dust No)
Combustible Dust No	
)
Carcinogenicity)
Acute toxicity (any route of exposure))
Reproductive toxicity Yes	S
Skin Corrosion or Irritation No)
Respiratory or Skin Sensitization No)
Serious eye damage or eye irritation No)
Specific target organ toxicity (single or repeated exposure) No)
Aspiration Hazard No)
Germ cell mutagenicity No)
Simple Asphyxiant No)

US. EPA CERCLA HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES (40 CFR 302.4)

None Reported

State Regulations

US. CALIFORNIA PROPOSITION 65

None Reported

National Inventory Status

National inventory Status		
National Inventory	Status	
Australia - AICS	Y	
Canada - DSL	Υ	
Canada - NDSL	N (paraffinic distillate, heavy, hydrotreated (severe); paraffinic distillate, heavy, solvent-dewaxed (severe); zinc O,O-bis(sec-butyl & isooctyl)dithiophosphate; paraffinic distillate, light, hydrotreated (severe))	
China - IECSC	Υ	
Europe - EINEC / ELINCS / NLP	N (zinc O,O-bis(sec-butyl & isooctyl)dithiophosphate)	
Japan - ENCS	Υ	
Korea - KECI	N (zinc O,O-bis(sec-butyl & isooctyl)dithiophosphate)	
New Zealand - NZIoC	Υ	
Philippines - PICCS	Υ	
USA - TSCA	Υ	
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)	

SECTION 16 OTHER INFORMATION

Revision Date	23/12/2015
Initial Date	Not Available

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average

PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。

IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level

LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value

LOD: Limit Of Detection

OTV: Odour Threshold Value

BCF: BioConcentration Factors

BEI: Biological Exposure Index

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