

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name HY-LIFE
Recommended Use Lubricant
Information on Manufacturer
 MANTEK, DIVISION OF NCH CORP.
 BOX 152170
 IRVING, TEXAS 75015

Product Code 0536
Chemical Nature Petroleum distillates
Emergency Telephone Number
 CHEMTREC® 800-424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview

Warning
 Causes skin irritation
 May cause allergic skin reaction
 Causes eye irritation
 May be harmful if inhaled
 May be harmful if swallowed

Color Red **Physical State** Liquid **Odor** Petroleum distillates
Potential Health Effects
Principle Route of Exposure Skin contact, Eye contact.
Primary Routes of Entry Ingestion
Acute Effects
Eyes Causes eye irritation
Skin Causes skin irritation. Repeated exposure may cause skin dryness or cracking
Inhalation May cause irritation of respiratory tract. Inhalation may cause central nervous system effects
Ingestion Ingestion may cause irritation to mucous membranes
Chronic Toxicity Prolonged skin contact may defat the skin and produce dermatitis, May cause damage to the kidneys/liver/eyes/brain/digestive system/central nervous system if swallowed.
Target Organ Effects Liver, Kidney, Central nervous system, Heart, Blood, Bone Marrow, Lungs, Eyes, Skin.
Aggravated Medical Conditions Skin disorders, Respiratory disorders, Liver disorders, Kidney disorders, Blood disorders, Neurological disorders, Heart disease.
Potential Environmental Effects See Section 12 for additional Ecological information

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No
Petroleum distillates, solvent-refined heavy paraffinic (<3% DMSO extractable)	64741-88-4
Naphtha (petroleum), heavy aromatic	64742-94-5
ZInc Alkyl dithiophosphate	68649-42-3
Petroleum distillates, solvent dewaxed heavy paraffinic (<3% DMSO extractable)	64742-65-0
Alcohols, C11-14, Iso-, C13 rich	68526-86-3
2,6-Di-tert-butylphenol	128-39-2
2-Tert-Butylphenol	88-18-6
Naphthalene	91-20-3
1,3,5-Trimethylbenzene	108-67-8
Pseudocumene	95-63-6

4. FIRST AID MEASURES

General Advice Avoid contact with skin, eyes, and clothing
Eye Contact Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists
Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing before re-use
Inhalation If inhaled, remove to fresh air. Get medical attention if symptoms occur
Ingestion Drink 1 or 2 glasses of water. Do not induce vomiting. Get medical attention if symptoms occur
Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flash Point >200.1°F/>93°C **Method** Tag closed cup
Autoignition Temperature No information available
Flammability Limits in Air % No information available
Suitable Extinguishing Media Water spray. Carbon dioxide (CO2). Foam. Dry chemical
Specific Hazards Arising from the Chemical Material can create slippery conditions
Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear
NFPA Health 1 **Flammability** 1 **Instability** 0
HMIS Health 1 **Flammability** 1 **Instability** 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use personal protective equipment. Material can create slippery conditions. Prevent further leakage or spillage if safe to do so
Environmental Precautions	Do not flush into surface water or sanitary sewer system
Methods for Containment	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13)
Methods for Cleaning Up	Pick up and transfer to properly labeled containers
Neutralizing Agent	Not applicable

7. HANDLING AND STORAGE

Handling	Avoid contact with skin, eyes, and clothing			
Storage	Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place			
Storage Temperature	Minimum	-10°F/-23°C	Maximum	130°F/54°C
Storage Conditions	Indoor	X	Outdoor	
			Heated	
				Refrigerated

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Petroleum distillates, solvent-refined heavy paraffinic (<3% DMSO extractable)	TWA: 5 mg/m ³ STEL: 10 mg/m ³	TWA: 5 mg/m ³	IDLH: 2500 mg/m ³ STEL: 10 mg/m ³ TWA: 5 mg/m ³
Naphtha (petroleum), heavy aromatic	No data available	No data available	No data available
Zinc Alkyl dithiophosphate	No data available	No data available	No data available
Petroleum distillates, solvent dewaxed heavy paraffinic (<3% DMSO extractable)	TWA: 5 mg/m ³ STEL: 10 mg/m ³	TWA: 5 mg/m ³	No data available
Alcohols, C11-14, Iso-, C13 rich	No data available	No data available	No data available
2,6-Di-tert-butylphenol	No data available	No data available	No data available
2-Tert-Butylphenol	No data available	No data available	No data available
Naphthalene	Skin STEL: 15 ppm TWA: 10 ppm	TWA: 10 ppm TWA: 50 mg/m ³	IDLH: 250 ppm TWA: 10 ppm TWA: 50 mg/m ³ STEL 15 ppm STEL 75 mg/m ³
1,3,5-Trimethylbenzene	TWA: 25 ppm	No data available	TWA: 125 mg/m ³ TWA: 25 ppm
Pseudocumene	TWA: 25 ppm	No data available	TWA: 125 mg/m ³ TWA: 25 ppm

Engineering Measures	Ensure adequate ventilation
Personal Protective Equipment	
Eye/Face Protection	Safety glasses with side-shields
Skin Protection	Impervious gloves
Respiratory Protection	None under normal processing
General Hygiene Considerations	Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before re-use. Wear protective gloves/clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	Viscosity	Slightly Viscous
Color	Red	Odor	Petroleum distillates
Appearance	Transparent	pH	Not applicable
Specific Gravity	0.91	Evaporation Rate	0.01 (Butyl acetate=1)
Percent Volatile (Volume)	No information available	VOC Content (%)	No information available
Vapor Pressure	0.18 mmHg @ 70 °F	Vapor Density	No information available
Solubility	Insoluble	Boiling Point/Range	600°F/316°C

10. STABILITY AND REACTIVITY

Chemical Stability	Stable. Hazardous polymerization does not occur
Conditions to Avoid	Heat, flames, and sparks
Incompatible Products	Strong oxidizing agents, Reducing agents, Acids, Aldehydes, Halogenated compounds, Acid anhydrides.
Hazardous Decomposition Products	Carbon oxides, Nitrogen oxides (NOx), Sulfur oxides, Oxides of phosphorus, Zinc oxide fumes, Aldehydes, Smoke, Sulfides.
Possibility of Hazardous Reactions	None under normal processing

11. TOXICOLOGICAL INFORMATION

Product Information	No information available
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Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Petroleum distillates, solvent-refined heavy paraffinic (<3% DMSO extractable)	5000 mg/kg (Rat)	2000 mg/kg (Rabbit)	2.18 mg/L (Rat) 4 h	no data available	no data available
Naphtha (petroleum), heavy aromatic	5000 mg/kg (Rat)	2000 mg/kg (Rabbit)	590 mg/m ³ (Rat) 4 h	no data available	no data available
Zinc Alkyl dithiophosphate	no data available	no data available	no data available	no data available	no data available
Petroleum distillates, solvent dewaxed heavy	5000 mg/kg (Rat)	2000 mg/kg (Rabbit)	2.18 mg/L (Rat) 4 h	no data available	no data available

paraffinic (<3% DMSO extractable)					
Alcohols, C11-14, Iso-, C13 rich	17000 mg/kg (Rat)	2600 mg/kg (Rabbit)	no data available	no data available	no data available
2,6-Di-tert-butylphenol	5000 mg/kg (Rat)	10000 mg/kg (Rabbit)	no data available	no data available	no data available
2-Tert-Butylphenol	440 mg/kg (Rat)	705 mg/kg (Rat)	1070 mg/m ³ (Rat) 4 h	no data available	no data available
Naphthalene	490 mg/kg (Rat)	2500 mg/kg (Rat) 20 g/kg (Rabbit)	340 mg/m ³ (Rat) 1 h	no data available	no data available
1,3,5-Trimethylbenzene	5000 mg/kg (Rat) 8970 mg/kg (Rat)	no data available	24 g/m ³ (Rat) 4 h	no data available	no data available
Pseudocumene	8970 mg/kg (Rat) 3400 mg/kg (Rat)	3160 mg/kg (Rabbit)	18 g/m ³ (Rat) 4 h	no data available	no data available

Chronic Toxicity None known

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Petroleum distillates, solvent-refined heavy paraffinic (<3% DMSO extractable)	no data available	no data available	no data available	no data available	no data available
Naphtha (petroleum), heavy aromatic	no data available	no data available	no data available	no data available	CNS
Zinc Alkyl dithiophosphate	no data available	no data available	no data available	no data available	no data available
Petroleum distillates, solvent dewaxed heavy paraffinic (<3% DMSO extractable)	no data available	no data available	no data available	no data available	no data available
Alcohols, C11-14, Iso-, C13 rich	no data available	no data available	no data available	no data available	no data available
2,6-Di-tert-butylphenol	no data available	no data available	no data available	no data available	no data available
2-Tert-Butylphenol	no data available	no data available	no data available	no data available	no data available
Naphthalene	no data available	Skin Sensitization	no data available	no data available	eyes, blood, liver, kidneys, skin, CNS, bone marrow
1,3,5-Trimethylbenzene	no data available	no data available	no data available	no data available	eyes, skin, respiratory system, CNS, blood
Pseudocumene	no data available	no data available	no data available	no data available	eyes, skin, respiratory system, CNS, blood

Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Other
Petroleum distillates, solvent-refined heavy paraffinic (<3% DMSO extractable)	not applicable	not applicable	not applicable	not applicable	not applicable
Naphtha (petroleum), heavy aromatic	not applicable	not applicable	not applicable	not applicable	not applicable
Zinc Alkyl dithiophosphate	not applicable	not applicable	not applicable	not applicable	not applicable
Petroleum distillates, solvent dewaxed heavy paraffinic (<3% DMSO extractable)	not applicable	not applicable	not applicable	not applicable	not applicable
Alcohols, C11-14, Iso-, C13 rich	not applicable	not applicable	not applicable	not applicable	not applicable
2,6-Di-tert-butylphenol	not applicable	not applicable	not applicable	not applicable	not applicable
2-Tert-Butylphenol	not applicable	not applicable	not applicable	not applicable	not applicable
Naphthalene	not applicable	Group 2B	Reasonably Anticipated	X	not applicable
1,3,5-Trimethylbenzene	not applicable	not applicable	not applicable	not applicable	not applicable
Pseudocumene	not applicable	not applicable	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION

Product Information No information available

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Petroleum distillates, solvent-refined heavy paraffinic (<3% DMSO extractable)	no data available	96 Hr LC50 Oncorhynchus mykiss: >5000 mg/L	no data available	48 Hr EC50 Daphnia magna: >1000 mg/L	N/A
Naphtha (petroleum), heavy aromatic	72 Hr EC50 Skeletonema costatum: 2.5 mg/L	96 Hr LC50 Pimephales promelas: 19 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 2.34 mg/L; 96 Hr LC50 Lepomis macrochirus: 1740 mg/L [static]; 96 Hr LC50 Pimephales promelas: 45 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 41 mg/L	no data available	48 Hr EC50 Daphnia magna: 0.95 mg/L	2.9 - 6.1
Zinc Alkyl dithiophosphate	no data available	96 Hr LC50 Pimephales promelas: 1.0-5.0 mg/L [static]; 96 Hr LC50 Pimephales promelas: 10.0-35.0 mg/L [semi-static]	no data available	48 Hr EC50 Daphnia magna: 1-1.5 mg/L	N/A
Petroleum distillates, solvent dewaxed heavy paraffinic (<3% DMSO extractable)	no data available	96 Hr LC50 Oncorhynchus mykiss: >5000 mg/L	no data available	48 Hr EC50 Daphnia magna: >1000 mg/L	N/A
Alcohols, C11-14, Iso-, C13 rich	96 Hr EC50 Selenastrum capricornutum: 172.2 mg/L	96 Hr LC50 Oncorhynchus mykiss: 13.9 mg/L [static]; 96 Hr LC50 Pimephales promelas: 15.7 mg/L [static]; 96 Hr LC50 Pimephales promelas: 0.2 mg/L	no data available	48 Hr EC50 Daphnia magna: 37 mg/L	N/A
2,6-Di-tert-butylphenol	no data available	no data available	no data available	48 Hr EC50 Daphnia magna: 0.45 mg/L	N/A
2-Tert-Butylphenol	no data available	no data available	no data available	no data available	N/A
Naphthalene	96 Hr EC50 Skeletonema costatum: 0.4 mg/L	96 Hr LC50 Pimephales promelas: 7.72 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 1.6 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 0.91-2.82 mg/L [static]; 96 Hr LC50 Pimephales promelas: 1.99 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 31.0265 mg/L [static]	EC50 = 0.93 mg/L 30 min EC50 > 20 mg/L 18 h	48 Hr EC50 water flea: 2.16 mg/L	3.3
1,3,5-Trimethylbenzene	no data available	96 Hr LC50 Pimephales promelas: 7.72 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 3.48 mg/L	no data available	24 Hr EC50 water flea: 50 mg/L	N/A
Pseudocumene	no data available	96 Hr LC50 Pimephales promelas: 7.19-8.28 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 7.72 mg/L [flow-through]	no data available	48 Hr EC50 Daphnia magna: 6.14 mg/L	3.63

Persistence and Degradability No information available
Bioaccumulation No information available
Mobility No information available

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of as hazardous waste in compliance with local and national regulations
Container Disposal Do not re-use empty containers

14. TRANSPORT INFORMATION

DOT	Not regulated
Marine Pollutant	This product contains a chemical which is listed as a severe marine pollutant according to DOT
TDG	Not regulated
ICAO	Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated

15. REGULATORY INFORMATION

Inventories	
TSCA	Complies
DSL	Complies

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Zinc Alkyl dithiophosphate	68649-42-3	1-5	1.0
Naphthalene	91-20-3	0.1-1	0.1
Pseudocumene	95-63-6	0.1-1	1.0

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	Yes	No	No	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Petroleum distillates, solvent-refined heavy paraffinic (<3% DMSO extractable)	Not applicable	Not applicable
Naphtha (petroleum), heavy aromatic	Not applicable	Not applicable
Zinc Alkyl dithiophosphate	Not applicable	Not applicable
Petroleum distillates, solvent dewaxed heavy paraffinic (<3% DMSO extractable)	Not applicable	Not applicable
Alcohols, C11-14, Iso-, C13 rich	Not applicable	Not applicable
2,6-Di-tert-butylphenol	Not applicable	Not applicable
2-Tert-Butylphenol	Not applicable	Not applicable
Naphthalene	1 lb 100 lb	Not applicable
1,3,5-Trimethylbenzene	Not applicable	Not applicable
Pseudocumene	Not applicable	Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class

D2A Very toxic materials, D2B Toxic materials.



16. OTHER INFORMATION

Prepared By	Dan Hollas
Supersedes Date	09/13/2005
Issuing Date	01/15/2009
Reason for Revision	No information available
Glossary	No information available
List of References.	No information available

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