Safety Data Sheet

US Hazard Communication Standard 2024 (29 CFR 1910.1200)

Initial Preparation Date: 05.07.2026

Revision date: 05.07.2026

PennGrade 1 Full Synthetic, Limited Slip GL-5 Gear Oil SAE 75W-90

SECTION 1: Identification

Product Identifier

Product Name: PennGrade 1 Full Synthetic, Limited Slip GL-5 Gear Oil SAE 75W-90

Recommended Use of the Chemical and Restrictions on Use:

Recommended Uses: Lubricant

Restrictions on Use: Any other use other than recommended above.

Manufacturer or Supplier Details

Manufacturer:
United States
D-A Lubricant Company, Inc.
801 Edwards Dr
Lebanon, INDIANA 46052
T 317-923-5321 Toll Free 1-800-873-2582
www.dalube.com

Emergency Telephone Number:

United States
Emergency Number
1-800-424-9300 (USA/CAN 24 hours)

SECTION 2: Hazard Identification

Classification of the chemical in accordance with paragraph (d) of § 1910.1200:

Reproductive toxicity, category 2

Label elements

Hazard Symbol(s):

Signal Word: Warning

Hazard statement(s):

H361 Suspected of damaging fertility or the unborn child

Precautionary Statement(s):

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves, protective clothing and eye protection.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents and container in accordance with federal, state and local regulations.

Hazards Not Otherwise Classified: None

SECTION 3: Composition/Information on Ingredients

Identification	Name	Weight %

CAS Number: 64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic (contains <3% DMSO extract)	<65
CAS Number: 72623-87-1	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains <3% DMSO extract)	<45
CAS Number: 72623-87-1	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	<20
CAS Number: 27178-16-1	Diisodecyl adipate	5-10
CAS Number: 68511-50-2	1-Propene, 2-methyl-, sulfurized	1-5
CAS Number: 64742-65-0	Distillates (petroleum), solvent-dewaxed heavy paraffinic	0.1-1
CAS Number: 68955-53-3	Amines, C12-14-tert-alkyl	0.1-1
CAS Number: Trade Secret	Alkyl phosphonate	0.1-0.5
CAS Number: 68551-12-2	Alcohols, C12-16, ethoxylated	0.1-0.5
CAS Number: 64741-88-4	Distillates (petroleum), solvent-refined heavy paraffinic	<0.5
CAS Number: 112-90-3	(Z)-octadec-9-enylamine	<0.5
CAS Number: 298-07-7	Bis(2-ethylhexyl) hydrogen phosphate	<0.5
CAS Number: 1070-03-7	2-ethylhexyl dihydrogen phosphate	<0.5
CAS Number: 64741-88-4	Distillates (petroleum), solvent-refined heavy paraffinic (contains <3% DMSO extract)	<0.5
CAS Number: 64742-56-9	Distillates (petroleum), solvent-dewaxed light paraffinic	<0.1

Additional information:

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200).

SECTION 4: First Aid Measures

Description of Necessary Measures

General Notes:

Show this Safety Data Sheet to the doctor in attendance

After Inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If symptoms develop or persist, seek medical advice/attention

After Skin Contact:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention

After Eye Contact:

Rinse eyes with plenty of water for several minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention

After Ingestion:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention

Most Important Symptoms and Effects, Both Acute and Delayed

Acute Symptoms and Effects:

Not determined or not applicable.

Delayed Symptoms and Effects:

Long term exposure may affect fertility. Symptoms include, but are not limited to: menstrual problems, altered sexual behavior/fertility/ and pregnancy outcome. Long term exposure may also affect development of the unborn child. Symptoms include, but are not limited to: intrauterine growth retardation, pre-term birth, birth defects and postnatal death

Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary

Immediate Medical Attention:

No additional information.

Special Treatment:

No additional information.

Notes for the Doctor:

Treat symptomatically

SECTION 5: Firefighting Measures

Extinguishing Media

Suitable Extinguishing Media:

Water mist/fog, carbon dioxide, dry chemical or alcohol resistant foam

Unsuitable Extinguishing Media:

Do not use water jet

Specific Hazards Arising From The Chemical:

Thermal decomposition may produce irritating/toxic fumes/gases

Special Protective Equipment and Precautions for Fire-Fighters

Special Protective Equipment:

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

Special precautions

Avoid contact with skin, eyes, hair and clothing. Do not breathe fumes/gas/mists/aerosols/vapors/dusts. Move containers from fire area if safe to do so. Use water spray/fog for cooling fire exposed containers. Avoid unnecessary run-off of extinguishing media which may cause pollution

SECTION 6: Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided

Methods and Material for Containment and Cleaning Up:

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13)

SECTION 7: Handling and Storage

Precautions for Safe Handling:

Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

Conditions for Safe Storage, Including Any Incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

SECTION 8: Exposure Controls/Personal Protection

Only those substances with limit values have been included below.

Occupational Exposure Limit Values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Distillates (petroleum), hydrotreated heavy paraffinic (contains	64742-54-7	8-Hour TWA: 5 mg/m³ (As Paraffin oils: excluding metal working fluids, highly & severely refined, inhalable particulate matter)
	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	8-Hour TWA: 5 mg/m³ (Mineral oil, excluding metal working fluids, poorly and mildly refined. Poorly and mildly refined: Exposure by all routes should be carefully controlled to levels as low as possible.)
	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains	72623-87-1	8-Hour TWA: 5 mg/m³ (Mineral oil, excluding metal working fluids, poorly and mildly refined. Poorly and mildly refined: Exposure by all routes should be carefully controlled to levels as low as possible.)
	Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4	8-Hour TWA: 5 mg/m³ (highly & severely refined, inhalable particulate matter [As Paraffin oils])
	Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	8-Hour TWA: 5 mg/m³ (Oil mist, mineral; inhalable particulate matter)

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Distillates (petroleum), solvent-dewaxed light paraffinic	64742-56-9	8-Hour TWA: 5 mg/m³ (Oil mists, mineral; Pure, highly and severely refined; inhalable particulate matter)
NIOSH	Distillates (petroleum), hydrotreated heavy paraffinic (contains	64742-54-7	REL-TWA: 5 mg/m³ (As Paraffin oils [up to 10 hr])
	Distillates (petroleum), hydrotreated heavy paraffinic (contains	64742-54-7	IDLH: 2500 mg/m³ (As Paraffin oils)
	Distillates (petroleum), hydrotreated heavy paraffinic (contains	64742-54-7	15-Minute STEL: 10 mg/m³ (As Paraffin oils)
	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	REL-TWA: 5 mg/m³ ([up to 10 hr] - Petroleum distillates, mildly or poorly refined)
	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	IDLH: 2500 mg/m³ (Petroleum distillates, mildly or poorly refined)
	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains	72623-87-1	REL-TWA: 5 mg/m³ ([up to 10 hr] - as Paraffin oils)
	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains	72623-87-1	IDLH: 2500 mg/m³ (as Paraffin oils)
	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains	72623-87-1	15-Minute STEL: 10 mg/m³ (as Paraffin oils)
	Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4	REL-TWA: 5 mg/m³ (As Paraffin oils [up to 10 h])
	Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4	15-Minute STEL: 10 mg/m³ (As Paraffin oils)
	Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4	IDLH: 2500 mg/m³ (As Paraffin oils)
	Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	REL-TWA: 5 mg/m³ (Oil mist, mineral [up to 10 hr])
	Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	IDLH: 2500 mg/m³ (Oil mist, mineral)
	Distillates (petroleum), solvent-dewaxed light paraffinic	64742-56-9	REL-TWA: 5 mg/m³ (Oil mists, mineral [up to 10 hr])
	Distillates (petroleum), solvent-dewaxed light paraffinic	64742-56-9	IDLH: 2500 mg/m³ (Oil mists, mineral)
United States(California)	Distillates (petroleum), hydrotreated heavy paraffinic (contains	64742-54-7	8-Hour TWA-PEL: 5 mg/m³ (As Paraffin oils, particulate)
	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	8-Hour TWA-PEL: 5 mg/m³ (particulate - Petroleum distillates, mildly or poorly refined)
	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains	72623-87-1	8-Hour TWA-PEL: 5 mg/m³ (particulate, as Paraffin oils)
	Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4	8-Hour TWA-PEL: 5 mg/m³ (As Paraffin oils)
	Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	8-Hour TWA-PEL: 5 mg/m³ (Oil mist, mineral, particulate)
	Distillates (petroleum), solvent-dewaxed light paraffinic	64742-56-9	8-Hour TWA-PEL: 5 mg/m³ (Oil mists, mineral, particulate)
OSHA	Distillates (petroleum), hydrotreated heavy paraffinic (contains	64742-54-7	8-Hour TWA-PEL: 5 mg/m³ (As Paraffin oils)
	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	8-Hour TWA-PEL: 5 mg/m³ (Petroleum distillates, mildly or poorly refined)

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains	72623-87-1	8-Hour TWA-PEL: 5 mg/m³ (highly & severely refined, inhalable particulate matter, As Paraffin oils)
	Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4	8-Hour TWA-PEL: 5 mg/m³ (As Paraffin oils)
	Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	8-Hour TWA-PEL: 5 mg/m³ (Oil mist, mineral)
	Distillates (petroleum), solvent-dewaxed light paraffinic	64742-56-9	8-Hour TWA-PEL: 5 mg/m³ (Oil mists, mineral)

Biological Limit Values:

No biological exposure limits noted for the ingredient(s).

Information on Monitoring Procedures:

Not determined or not applicable.

Appropriate Engineering Controls:

Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Individual Protection Measures, Such as Personal Protective Equipment

Eye and Face Protection:

Safety glasses or goggles. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Skin and Body Protection:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. 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. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory Protection:

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn.

General Hygienic Measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

SECTION 9: Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Physical state	Liquid
Color	Amber
Odor (includes odor threshold)	Petroleum
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flammability	Not determined or not available.

Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Flash point	Not determined or not available.
Auto-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
pH	Not determined or not available.
Kinematic viscosity	98mm²/s @ 40 °C
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Vapor pressure (includes evaporation rate)	Not determined or not available.
Density and/or relative density	Not determined or not available.
Relative vapor density	Not determined or not available.
Particle characteristics	Not determined or not available.

Other Information

No additional information.

SECTION 10: Stability and Reactivity

Reactivity:

Not reactive under recommended handling and storage conditions.

Chemical Stability:

Stable under recommended handling and storage conditions.

Possibility of hazardous reactions, including those associated with foreseeable emergencies:

Hazardous reactions are not anticipated under recommended conditions of handling and storage.

Conditions to Avoid:

Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Incompatible Materials:

Acids; Oxidizing agents

Hazardous Decomposition Products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological Information

Acute Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data:

Name	Route	Result
Distillates (petroleum), hydrotreated heavy paraffinic (contains <3% DMSO extract)	oral	LD50 Rat: >5000 mg/kg
	dermal	LD50 Rabbit: > 5000 mg/kg
	inhalation	LC50 Rat: 5.3 mg/L (4 hr [aerosol])
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	oral	LD50 Rat: >5000 mg/kg
	dermal	LD50 Rabbit: >2000 mg/kg
	inhalation	LC50 Rat: >5.3 mg/L (4 hr [aerosol])

Name	Route	Result
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains <3% DMSO extract)	oral	LD50 Rat: >5000 mg/kg
	dermal	LD50 Rabbit: >2000 mg/kg
	inhalation	LC50 Rat: >5.3 mg/L (4 hr [aerosol])
Diisodecyl adipate	oral	LD50 Rat: >5000 mg/kg
	dermal	LD50 Rat: >2000 mg/kg
Distillates (petroleum), solvent-refined heavy paraffinic	oral	LD50 Rat: >5000 mg/kg
	inhalation	LC50 Rat: 2.18 mg/L (4hr [aerosol])
	dermal	LD50 Rabbit: >5000 mg/kg
Distillates (petroleum), solvent-dewaxed heavy paraffinic	oral	LD50 Rat: > 15,000 mg/kg
	inhalation	LC50 Rat: >2.4 mg/L (4 hr [aerosol])
	dermal	LD50 Rabbit: > 5000 mg/kg
1-Propene, 2-methyl-, sulfurized	oral	LD50 Rat: 5700 mg/kg
	inhalation	LC50 Rat: >0.39 mg/L (4 hr [vapor])
(Z)-octadec-9-enylamine	oral	LD50 Rat: 1200 mg/kg
	dermal	LD50 Rat: >2000 mg/kg
Amines, C12-14-tert-alkyl	oral	LD50 Rat: 300 mg/kg
	Dermal ATE	LD50 Rabbit: 300 mg/kg
	inhalation	LC50 Ray: 157 ppmV (4 hr)
Bis(2-ethylhexyl) hydrogen phosphate	Oral ATE	LD50 Rat: 500 mg/kg
	dermal	LD50 Rabbit: >2000 mg/kg
2-ethylhexyl dihydrogen phosphate	oral	LD50 Rat: 3450 mg/kg
	dermal	LD50 Rabbit: >4650 mg/kg
Distillates (petroleum), solvent-refined heavy paraffinic (contains <3% DMSO extract)	oral	LD50 Rat: >5000 mg/kg
	inhalation	LC50 Rat: >5.53 mg/L (4 h [aerosol])
	dermal	LD50 Rabbit: >5000 mg/kg
Distillates (petroleum), solvent-dewaxed light paraffinic	oral	LD50 Rat: > 5000 mg/kg
	dermal	LD50 Rabbit: > 5000 mg/kg
	inhalation	LC50 Rat: > 5.53 mg/L (4 hr [aerosol])
Alkyl phosphonate	inhalation	LC50 rat: >22 mg/L (1 hour)
	dermal	LD50 rabbit: 5000 mg/kg
	oral	LD50 rat: >3000 mg/kg

Skin Corrosion/Irritation

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data:

Name	Result
(Z)-octadec-9-enylamine	Causes severe skin burns.
Amines, C12-14-tert-alkyl	Causes severe skin burns.
Bis(2-ethylhexyl) hydrogen phosphate	Causes severe skin burns.
2-ethylhexyl dihydrogen phosphate	Causes severe skin burns.

Name	Result
Alcohols, C12-16, ethoxylated	Causes skin irritation.

Serious Eye Damage/Irritation

Assessment: Based on available data, the classification criteria are not met.

Product Data:
No data available.

Substance Data:

Name	Result
(Z)-octadec-9-enylamine	Causes serious eye damage.
Amines, C12-14-tert-alkyl	Causes serious eye damage.
Bis(2-ethylhexyl) hydrogen phosphate	Causes serious eye damage.
2-ethylhexyl dihydrogen phosphate	Causes serious eye damage.
Alcohols, C12-16, ethoxylated	Causes serious eye damage.
Alkyl phosphonate	405 Acute Eye - Rabbit - Eye Irritant

Respiratory or Skin Sensitization

Assessment: Based on available data, the classification criteria are not met.

Product Data:
No data available.

Substance Data:

Name	Result
(Z)-octadec-9-enylamine	May cause respiratory irritation.
Amines, C12-14-tert-alkyl	May cause an allergic skin reaction.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data:

Name	Species	Result
Distillates (petroleum), hydrotreated heavy paraffinic (contains <3% DMSO extract)		The classification as a carcinogen does not apply because it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346.
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based		May cause cancer. Insufficiently refined lubricant base oils may be carcinogenic to the skin. Insufficiently refined based oils, containing ≥ 3% DMSO extract as measured by IP346, should be classified as a carcinogen. The carcinogen classification does not apply to sufficiently refined base oils, containing ≤ 3% DMSO extract as measured by IP346.
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains <3% DMSO extract)		The classification as a carcinogen does not apply because it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346.
Distillates (petroleum), solvent-refined heavy paraffinic		May cause cancer.

Name	Species	Result
Distillates (petroleum), solvent-dewaxed heavy paraffinic		May cause cancer.
Distillates (petroleum), solvent-dewaxed light paraffinic		May cause cancer. Insufficiently refined lubricant base oils may be carcinogenic to the skin. Insufficiently refined based oils, containing ≥ 3% DMSO extract as measured by IP346, should be classified as a carcinogen. The carcinogen classification does not apply to sufficiently refined base oils, containing ≤ 3% DMSO extract as measured by IP346.
Alkyl phosphonate	Rat	2 years - Negative - Oral- NOAEL

International Agency for Research on Cancer (IARC):

Name	Classification
Distillates (petroleum), hydrotreated heavy paraffinic (contains <3% DMSO extract)	Not Applicable
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	Group 1
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains <3% DMSO extract)	Not Applicable
Diisodecyl adipate	Not Applicable
Distillates (petroleum), solvent-refined heavy paraffinic	Group 1
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Group 1
1-Propene, 2-methyl-, sulfurized	Not Applicable
(Z)-octadec-9-enylamine	Not Applicable
Amines, C12-14-tert-alkyl	Not Applicable
Bis(2-ethylhexyl) hydrogen phosphate	Not Applicable
2-ethylhexyl dihydrogen phosphate	Not Applicable
Alcohols, C12-16, ethoxylated	Not Applicable
Distillates (petroleum), solvent-refined heavy paraffinic (contains <3% DMSO extract)	Not Applicable
Distillates (petroleum), solvent-dewaxed light paraffinic	Group 1

National Toxicology Program (NTP):

Name	Classification
Distillates (petroleum), hydrotreated heavy paraffinic (contains <3% DMSO extract)	Not Applicable
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	Known to be human carcinogens
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains <3% DMSO extract)	Not Applicable
Diisodecyl adipate	Not Applicable
Distillates (petroleum), solvent-refined heavy paraffinic	Known to be human carcinogens
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Known to be human carcinogens
1-Propene, 2-methyl-, sulfurized	Not Applicable
(Z)-octadec-9-enylamine	Not Applicable
Amines, C12-14-tert-alkyl	Not Applicable
Bis(2-ethylhexyl) hydrogen phosphate	Not Applicable
2-ethylhexyl dihydrogen phosphate	Not Applicable
Alcohols, C12-16, ethoxylated	Not Applicable
Distillates (petroleum), solvent-refined heavy paraffinic (contains <3% DMSO extract)	Not Applicable
Distillates (petroleum), solvent-dewaxed light paraffinic	Known to be human carcinogens

OSHA Carcinogens:

Ingredient Name	CAS	OSHA Carcinogens Status
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	Yes
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	Yes
Distillates (petroleum), solvent-dewaxed light paraffinic	64742-56-9	Yes

Germ Cell Mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data:

Name	Result
Alkyl phosphonate	471 Bacterial Reverse Mutation Test - Experiment: In Vitro Subject: Bacteria - Negative
	473 In Vitro Mammalian Chromosomal Aberration Test - Subject: Mammalian - Animal - Negative
	None available - Rat - Negative oral - Based on data for a similar substance.

Reproductive Toxicity

Assessment:

Suspected of damaging fertility or the unborn child.

Product Data:

No data available.

Substance Data:

Name	Result
Alkyl phosphonate	416 Two-Generation Reproductions Toxicity Study - Oral - Rat - Maternal Toxicity: Positive - Fertility: Negative - Developmental Toxin: Equivocal - Based on data for a similar substance. WOE does not support classification.

Specific Target Organ Toxicity (Single Exposure)

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data:

Name	Result
(Z)-octadec-9-enylamine	May cause damage to gastro-intestinal tract, liver and immune system through prolonged or repeated exposure.

Specific Target Organ Toxicity (Repeated Exposure)

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data:

Name	Result
Alkyl phosphonate	None Available - Rabbit - 20 mg/kg - No time provided - Sub-acute NOAEL Dermal - Based on data for a similar substance.
	422 Combined Repeated Dose Toxicity Study with Developmental toxicity screening test - Rat - 250mg/kg - No time provided - Sub-acute NOAEL Oral - Based on data for a similar substance.
	408 Repeated dose 90-day oral toxicity study in rodents - Rat - 125mg/kg - no time provided - Sub-chronic NOAEL Oral - Based on data for a similar substance.
	453 Combined Chronic Toxicity/ Carcinogenicity Studies - Rat - 0.13 mg/L - 12 months - Chronic NOEL inhalation Dust and Mists - Based on data for a similar substance.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data:

Name	Result
Distillates (petroleum), hydrotreated heavy paraffinic (contains <3% DMSO extract)	May be fatal if swallowed and enters airways.
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	May be fatal if swallowed and enters airways.
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains <3% DMSO extract)	May be fatal if swallowed and enters airways.
Distillates (petroleum), solvent-refined heavy paraffinic	May be fatal if swallowed and enters airways.
Distillates (petroleum), solvent-dewaxed heavy paraffinic	May be fatal if swallowed and enters airways.
(Z)-octadec-9-enylamine	May be fatal if swallowed and enters airways.
Distillates (petroleum), solvent-dewaxed light paraffinic	May be fatal if swallowed and enters airways.

Information on Likely Routes of Exposure:

Inhalation; Ingestion; Skin contact; Eye contact.

Symptoms Related to the Physical, Chemical, and Toxicological Characteristics:

Refer to section 4 of this SDS.

Interactive effects:

No additional information.

Other Information:

No additional information.

SECTION 12: Ecological Information

Ecotoxicity

Acute (Short-Term) Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data:

Name	Result
Distillates (petroleum), hydrotreated heavy paraffinic (contains <3% DMSO extract)	Fish LC50 Pimephales promelas: > 100 mg/L (96 hr [LL50 - mortality])
	Aquatic Invertebrates EC50 Daphnia magna: > 10,000 mg/L (48 hr [EL50 - mobility, Read-across substance data])
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	Aquatic Invertebrates EC50 Daphnia magna: >10,000 mg/L (EL50; 48 hr[mobility])
	Fish LC50 Pimephales promelas: >100 mg/L (LL50; 96hr)
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains <3% DMSO extract)	Aquatic Invertebrates EC50 Daphnia magna: >10,000 mg/L (EL50; 48 hr [mobility])
	Fish LC50 Pimephales promelas: >100 mg/L (LL50; 96hr)

Name	Result
Diisodecyl adipate	Fish LC50 Leuciscus idus: >500 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: >500 mg/L (48 hr [mobility])
	Aquatic Plants EC50 Desmodesmus subspicatus: >100 mg/L (72 hr [growth rate])
Distillates (petroleum), solvent-refined heavy paraffinic	Fish LC50 Pimephales promelas: >100 mg/L (LL50; 96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: > 10,000 mg/L (EL50; 48 h; mobility)
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Fish LC50 Pimephales promelas: > 100 mg/L (96 hr [LL50 - mortality])
	Aquatic Invertebrates EC50 Daphnia magna: > 10,000 mg/L (48 hr [EL50 - mobility, Read-across substance data])
	Fish LC50 Oncorhynchus mykiss: >5000 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: >1000 mg/L (48 hr)
1-Propene, 2-methyl-, sulfurized	Fish LC50 Pimephales promelas: 250 - 500 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: >1000 mg/L (48 hr)
Bis(2-ethylhexyl) hydrogen phosphate	Fish LC50 Oncorhynchus mykiss: 20 mg/L (96 hr)
	Aquatic Plants EC50 Desmodesmus subspicatus: >100 mg/L (72 hr [growth rate, Read-across substance data])
Distillates (petroleum), solvent-dewaxed light paraffinic	Fish LC50 Pimephales promelas: >100 mg/L (96 hr [LL50 - mortality])
	Aquatic Invertebrates EC50 Daphnia magna: >10,000 mg/L (48 hr [EL50 - mobility])
	Aquatic Invertebrates EC50 Daphnia magna: >1000 mg/L (48 hr)
	Fish LC50 Oncorhynchus mykiss: >5000 mg/L (96 hr)
Alkyl phosphonate	Aquatic Plants EC50 Algae - pseudokirchneriella subcapitata: 14.4 mg/L (72 hours)
	Bacteria EC50 Micro-organism: >10000 mg/L (EL50 3 hours Based on data for a similar substance.)
	Aquatic Invertebrates LC50 Daphnia - Daphnia magna: 20.8 mg/L (IC50 48 hours)
	Fish LC50 Fish - Danio rerio: 63.4 mg/L (96 hours)

Chronic (Long-Term) Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data:

Name	Result
Distillates (petroleum), hydrotreated heavy paraffinic (contains <3% DMSO extract)	Fish NOEC Oncorhynchus mykiss: >= 1000 mg/L (14 d [NOELR-mortality, QSAR data])
	Aquatic Invertebrates NOEC Daphnia magna: 10 mg/L (21 d [NOEL-reproduction, Read-across substance data])
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	Aquatic Invertebrates NOEC Daphnia magna: 10 mg/L (NOEL; 21d [reproduction])
	Fish NOEC Oncorhynchus mykiss: >= 1000 mg/L (NOELR; 14d)
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains <3% DMSO extract)	Aquatic Invertebrates NOEC Daphnia magna: 10 mg/L (NOEL; 21d [reproduction])
	Fish NOEC Oncorhynchus mykiss: >= 1000 mg/L (NOELR; 14d)

Name	Result
Diisodecyl adipate	Aquatic Invertebrates NOEC Daphnia magna: >= 0.77 mg/L (21 d [reproduction and survival])
Distillates (petroleum), solvent-refined heavy paraffinic	Fish NOEC Oncorhynchus mykiss: >= 1,000 mg/L (14 d; NOELR; QSAR)
	Aquatic Invertebrates NOEC Daphnia magna: 10 mg/L (21 d; NOEL; reproduction)
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Aquatic Invertebrates NOEC Daphnia magna: 10 mg/L (21 d [NOEL - reproduction, Read-across substance data])
	Fish NOEC Oncorhynchus mykiss: >=1000 mg/L (14 d [NOEL-mortality, Read-across substance data])
Bis(2-ethylhexyl) hydrogen phosphate	Fish NOEC Oncorhynchus mykiss: 20.6 mg/L (48 d [mortality])
Distillates (petroleum), solvent-dewaxed light paraffinic	Aquatic Invertebrates NOEC Daphnia magna: 10 mg/L (21 d [NOEL - reproduction])
Alkyl phosphonate	Aquatic Plants EC10 Algae - Pseudokirchneriella subcapitata: 5.1 mg/L (72 hours)
	Fish NOEC Daphnia - Daphnia magna: 4.1 mg/L (21 days NOEL Based on data for a similar substance.)

Persistence and Degradability

Product Data: No data available.

Substance Data:

Name	Result
Distillates (petroleum), hydrotreated heavy paraffinic (contains <3% DMSO extract)	Standard biodegradability studies are not applicable to petroleum UVCB substances.
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	Standard biodegradation studies are not applicable to petroleum UVCB substances.
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains <3% DMSO extract)	Standard biodegradation studies are not applicable to petroleum UVCB substances.
Diisodecyl adipate	The substance is readily biodegradable. >90% degradation in water, measured by O2 consumption, after 28 days.
Distillates (petroleum), solvent-refined heavy paraffinic	The substance is inherently biodegradable. 31% degradation measured by O2 consumption after 28 days.
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Standard biodegradability studies are not applicable to petroleum UVCB substances.
(Z)-octadec-9-enylamine	Based on the available studies on biodegradation, the substance is estimated to be readily biodegradable, fulfilling the 10-days-window criterion.
Bis(2-ethylhexyl) hydrogen phosphate	The substance is readily biodegradable. 75% degradation in water, measured by O2 consumption, after 28 days.
Distillates (petroleum), solvent-refined heavy paraffinic (contains <3% DMSO extract)	The substance is inherently biodegradable, 31% degradation measured by O2 consumption after 28 days.

Name	Result
Distillates (petroleum), solvent-dewaxed light paraffinic	The substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Alkyl phosphonate	OECD 301F Ready Biodegradability - Manometric Respirometry Test 89.8% - inherent - 28 days - Readily biodegradable but failing the 10-day window

Bioaccumulative Potential

Product Data: No data available.

Substance Data:

Name	Result
Distillates (petroleum), hydrotreated heavy paraffinic (contains <3% DMSO extract)	Standard bioaccumulation studies are not applicable to petroleum UVCB substances.
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains <3% DMSO extract)	Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Diisodecyl adipate	Bioaccumulation is not expected. The aquatic BCF values for the components of the UVCB substance, diisodecyl adipate, were estimated using five QSAR models: The highest reliable BCF value obtained using these models was 412 L/kg ww.
Distillates (petroleum), solvent-refined heavy paraffinic	The substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Standard bioaccumulation studies are not applicable to petroleum UVCB substances.
(Z)-octadec-9-enylamine	Bioaccumulation is not expected. BCF (aquatic species): 173 L/kg ww
Bis(2-ethylhexyl) hydrogen phosphate	The substance is not expected to bioaccumulate (BCF: 2.7 - 6 dimensionless, basis: whole body w.w., specie : Fish).
Distillates (petroleum), solvent-refined heavy paraffinic (contains <3% DMSO extract)	The substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Distillates (petroleum), solvent-dewaxed light paraffinic	The substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Alkyl phosphonate	LogPow=1.81 BCF=N/A Potential= Low

Mobility in Soil

Product Data: No data available.

Substance Data:

Name	Result
Distillates (petroleum), hydrotreated heavy paraffinic (contains <3% DMSO extract)	Standard adsorption/desorption studies are not applicable to petroleum UVCB substances.

Name	Result
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains <3% DMSO extract)	Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Diisodecyl adipate	The substance is immobile, therefore, there is a significant potential for adsorption to soil and sediment (log Koc: >= 4.998 <= 6.041 dimensionless, QSAR substance data).
Distillates (petroleum), solvent-refined heavy paraffinic	The substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Standard adsorption/desorption studies are not applicable to petroleum UVCB substances.
Bis(2-ethylhexyl) hydrogen phosphate	The substance is moderately mobile, therefore, there is moderate potential for adsorption to soil and sediment (log Koc: 2.4 at 25 °C).
Distillates (petroleum), solvent-refined heavy paraffinic (contains <3% DMSO extract)	The substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Distillates (petroleum), solvent-dewaxed light paraffinic	The substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.

Results of PBT and vPvB assessment

Product Data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT.
vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

Substance Data:

PBT assessment:

Distillates (petroleum), hydrotreated heavy paraffinic (contains <3% DMSO extract)	The substance is not PBT.
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	The substance is not PBT.
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains <3% DMSO extract)	The substance is not PBT.
Diisodecyl adipate	The substance is not PBT.
Distillates (petroleum), solvent-refined heavy paraffinic	The substance is not PBT.
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Standard PBT studies are not applicable to petroleum UVCB substances.
(Z)-octadec-9-enylamine	The substance is not PBT.

Bis(2-ethylhexyl) hydrogen phosphate	The substance is not PBT.
Distillates (petroleum), solvent-refined heavy paraffinic (contains <3% DMSO extract)	The substance is not PBT.
Distillates (petroleum), solvent-dewaxed light paraffinic	The substance is a UVCB and does not contain constituents included in the SVHC candidate list as PBT at concentrations above 0.1%.

vPvB assessment:

Distillates (petroleum), hydrotreated heavy paraffinic (contains <3% DMSO extract)	The substance is not vPVb.
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	The substance is not vPvB.
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains <3% DMSO extract)	The substance is not vPvB.
Diisodecyl adipate	The substance is not vPvB.
Distillates (petroleum), solvent-refined heavy paraffinic	The substance is not vPvB.
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Standard vBvB studies are not applicable to petroleum UVCB substances.
(Z)-octadec-9-enylamine	The substance is not vPvB.
Bis(2-ethylhexyl) hydrogen phosphate	The substance is not vPvB.
Distillates (petroleum), solvent-refined heavy paraffinic (contains <3% DMSO extract)	The substance is not vPvB.
Distillates (petroleum), solvent-dewaxed light paraffinic	The substance is a UVCB and does not contain constituents included in the SVHC candidate list as vPvB at concentrations above 0.1%.

Other Adverse Effects: No additional information.

SECTION 13: Disposal Considerations

Disposal Methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory agencies. Dispose of in accordance with all applicable local, regional, state, and federal regulations.

Contaminated packaging:

Not determined or not applicable.

SECTION 14: Transport Information

United States Transportation of Dangerous Goods (49 CFR DOT)

UN Number	Not regulated
UN Proper Shipping Name	Not regulated
UN Transport Hazard Class(es)	None
Packing Group	None
Environmental Hazards	None
Special Precautions for User	None

International Maritime Dangerous Goods (IMDG)

UN Number	Not regulated
UN Proper Shipping Name	Not regulated
UN Transport Hazard Class(es)	None
Packing Group	None
Environmental Hazards	None
Special Precautions for User	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN Number	Not regulated
UN Proper Shipping Name	Not regulated
UN Transport Hazard Class(es)	None
Packing Group	None
Environmental Hazards	None
Special Precautions for User	None

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Bulk Name	Not Applicable
Ship Type	Not Applicable
Pollution Category	Not Applicable

SECTION 15: Regulatory Information

United States Regulations

Inventory Listing (TSCA): All ingredients are listed-active or exempt.
Significant New Use Rule (TSCA Section 5): None of the ingredients are listed.
Export Notification under TSCA Section 12(b): None of the ingredients are listed.
SARA Section 302 Extremely Hazardous Substances: None of the ingredients are listed.
SARA Section 313 Toxic Chemicals: None of the ingredients are listed.
CERCLA: None of the ingredients are listed.
RCRA: None of the ingredients are listed.
Section 112(r) of the Clean Air Act (CAA): None of the ingredients are listed.
Massachusetts Right to Know:

64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic (contains <3% DMSO extract)	Listed
72623-87-1	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains <3% DMSO extract)	Listed
64741-88-4	Distillates (petroleum), solvent-refined heavy paraffinic	Listed

64742-65-0	Distillates (petroleum), solvent-dewaxed heavy paraffinic	Listed
64742-56-9	Distillates (petroleum), solvent-dewaxed light paraffinic	Listed

New Jersey Right to Know:

64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic (contains <3% DMSO extract)	Listed
72623-87-1	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains <3% DMSO extract)	Listed
64741-88-4	Distillates (petroleum), solvent-refined heavy paraffinic	Listed
64742-65-0	Distillates (petroleum), solvent-dewaxed heavy paraffinic	Listed
298-07-7	Bis(2-ethylhexyl) hydrogen phosphate	Listed

New York Right to Know:

298-07-7	Bis(2-ethylhexyl) hydrogen phosphate	Listed

Pennsylvania Right to Know:

64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic (contains <3% DMSO extract)	Listed
72623-87-1	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (contains <3% DMSO extract)	Listed
64741-88-4	Distillates (petroleum), solvent-refined heavy paraffinic	Listed
64742-65-0	Distillates (petroleum), solvent-dewaxed heavy paraffinic	Listed

California Proposition 65:

⚠ **WARNING:** This product can expose you to chemicals including 1,4-dioxane, Methyloxirane, 2-ethylhexyl acrylate, ethyl acrylate, 2-naphthylamine and Vinyl Acetate which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

⚠ **WARNING:** This product can expose you to Ethylene oxide; 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.

Additional information: No additional information.

SECTION 16: Other Information

Disclaimer:

This product has been classified in accordance with OSHA HCS 2024 Guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as guidance for safe handling, use, storage, transportation, and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility of providing a safe workplace remains with the user.

NFPA: 2-1-0
HMIS: 2*-1-0-X
Initial Preparation Date: 05.07.2026
Revision date: 05.07.2026

End of Safety Data Sheet