



SAFETY DATA SHEET

Section 1: Identification

Product Identifier: KTL 4000

Product Code: Not Available

Recommended use: Lubricant

Recommended Restrictions on use: None known.

Manufacturer Information

Name: Kaishan Compressors USA, LLC

Address: 7650-A Stanton Street, Daphne, AL 36526

Phone number: 251-202-0577

Emergency phone number: 251-202-0577

Section 2: Hazard(s) Identification

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Reproductive toxicity: Category 2

GHS label elements

Hazard pictograms:



Signal word: Warning

Hazard statements:

Suspected of damaging fertility



Precautionary statements:

Prevention:

Obtain & review special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

Avoid personal contact. Observe good personal hygiene.

Storage:

Store in cool, dry place away from direct heat & moisture.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known. Disposal: Dispose in accordance with local/state/national requirements.

Section 3: Composition/information on ingredients

Chemical Name	CAS number	%
Mixture of severely hydrotreated and hydrocracked base oil (petroleum)	64742-54-7, 64742-55-8	< 73%
Lubricating oils(petroleum), C20-C50, hydrotreated neutral oil-based, high-viscosity	72623-85-9	< 15%
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	68411-46-1	*≥ 0.1 – 5.0%

*Actual amount is a trade secret

Section 4: First-aid measures

Inhalation: Move victim to fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.



Skin contact: Wash affected area with soap and water.

Eye contact: Flush eyes with water for at least 15 minutes. If irritation develops seek medical attention.

Ingestion: If swallowed and symptoms develop seek medical attention.

Most important symptoms/effects, acute and delayed: Prolonged contact may result in mild skin irritation and drying and cracking. Effects of overexposure may include irritation of the digestive tract, irritation of the respiratory tract, nausea and diarrhea.

Indication of immediate medical attention and special treatment needed: If exposed and experiencing symptoms, seek medical attention and indicate materials involved.

Section 5: Fire-fighting measures

General fire hazards: This material may burn but will not readily ignite.

Suitable extinguishing media: Dry chemical, CO₂, foam and water spray.

Unsuitable: Straight streams of water.

Specific hazards arising from the chemical: If container is not properly cooled, it can rupture in the heat of a fire.

Special protective equipment: Self-contained breathing apparatus and protective clothing.

Precautions for fire-fighters: Low hazard, liquid can burn upon heating to elevated temperatures. Isolate immediate hazard area keep authorized personnel out. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: Wear appropriate protective equipment.

Methods/materials for containments and clean-up: Absorb the material with inert absorbent and dispose of in accordance with federal, state and local laws.

Section 7: Handling and storage

Precautions for safe handling: Avoid inhalation of mists or vapors. Avoid prolonged or repeated contact with skin and eyes. Ensure adequate ventilation and wash hands after use.



Conditions for safe storage: Ground containers when transferring to avoid static discharge. Keep container closed.

Incompatible materials: Avoid contact with strong oxidizing agents.

Section 8: Exposure controls/ personal protection

Chemical name	OSHA/ACGIH	PEL/STEL	Value
Mixture of severely hydrotreated and hydrocracked base oil (petroleum)	ACGIH	TLV-TWA	5mg/m ³ , inhalable fraction
	OSHA Z-1	PEL	5mg/m ³ , oil mist(mineral)
	NIOSH	STEL	Mg/m ³ oil mist (mineral)
Lubricating oils(petroleum), C20-C50, hydrotreated neutral oil-based, high-viscosity	ACGIH	TLV-TWA	5mg/m ³

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures: Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal protective equipment

Respiratory protection: Not required; except in case of aerosol formation

Filter type: Filter type A-P

Hand protection

Material: Nitrile rubber

Break through time: > 10 min

Protective index : Class 1



Remarks: Wear protective gloves. The breakthrough time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.

Appropriate engineering controls: Use good ventilation typically 10 air changes per minute should be used.

Respiratory protection: If vapor or mist is generated wear a NIOSH/MSA approved organic vapor/mist respirator.

Eye protection: Wear approved safety glasses with side shields or goggles.

Skin protection: Wear protective clothing and gloves to minimize exposure.

General considerations: Follow standard safe industrial chemical handling practices.

Section 9: Physical and chemical properties

Appearance

Physical state: Liquid

Color: Clear / Slight Yellow

Odor: Mild Petroleum

Odor threshold: Not available.

pH: Not available.

Melting point/freezing point: Not available.

Initial boiling point/boiling point range:

Flashpoint: ≥ 400 °F, ≥ 204 °C; ASTM D-92

Evaporation rate: Not available.

Flammability (solid, gas): Not available.

Flammability limits

Upper flammability limit: Not available.

Lower flammability limit: Not available.



Explosive limit

Upper explosive limit: Not available.

Lower explosive limit: Not available.

Vapor pressure: <0.1 mmHg @ 20 °C

Vapor density: >1

Relative density: 0.86 – 0.90

Solubility in water: Negligible

Partition coefficient: n-octanol/water: Not available.

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

Viscosity: 46 cSt @40°C

Section 10: Stability and reactivity

Reactivity: Stable under normal conditions of use.

Chemical stability: Stable.

Possibility of hazardous reactions: Polymerization is not known to occur.

Conditions to avoid: Avoid contact with incompatible materials and elevated temperatures.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: Carbon oxides, nitrogen oxides, sulfur oxides, phosphorous and zinc oxides.

Section 11: Toxicological information

Acute toxicity

Product:

Acute oral toxicity: Remarks: This information is not available.

Acute inhalation toxicity: Remarks: This information is not available.

Acute dermal toxicity: Remarks: This information is not available.



Components:

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Acute oral toxicity: LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 401

Acute dermal toxicity:
LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Product:

Remarks: This information is not available

Components:

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Species: Rabbit
Assessment: No skin irritation
Method: OECD Test Guideline 404
Result: No skin irritation

Serious eye damage/eye irritation

Product:

Remarks: This information is not available.

Components:

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Species: Guinea pig
Assessment: Did not cause sensitization on laboratory animals.
Method: OECD Test Guideline 406
Result: Did not cause sensitization on laboratory animals.

Germ cell mutagenicity

Product:

Genotoxicity in vitro: Remarks: No data available



Genotoxicity in vivo: Remarks: No data available

Carcinogenicity

Product:

Remarks: No data available

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

IARC/OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Product:

Effects on fertility: Remarks: No data available

Effects on fetal development: Remarks: No data available

Components:

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Reproductive toxicity - Assessment: - Fertility - Some evidence of adverse effects on sexual function and fertility, based on animal experiments.

Repeated dose toxicity

Product:

Remarks: This information is not available.

Aspiration toxicity

Product:

This information is not available.

Further information

Product:

Remarks: Information given is based on data on the components and the toxicology of similar products.



Symptoms related to the physical, chemical and toxicological characteristics: Prolonged contact may result in mild skin irritation and drying and cracking. Effects of overexposure may include irritation of the digestive tract, irritation of the respiratory tract, nausea and diarrhea.

Information on effects

Acute Toxicity: Not acutely toxic.

Irritation/Sensitization effects: Based on available data for components, product is not classified as sensitizing or irritating.

Germ Cell Mutagenicity: Based on available data for components, product is not known to be mutagenic.

Carcinogenicity: The petroleum base oils contained in this product have been highly refined through a variety of processes including severe hydrocracking, because of this, this product and/or its components are not considered carcinogenic by NTP, IARC or OSHA.

Specific target organ toxicity-single exposure: Based on available data for components, product is not known to cause target organ effects.

Specific target organ toxicity-repeat exposure: Based on available data, does not meet requirements for classification. Administration of certain mineral hydrocarbon white oils in the diet of Fisher344 rats at 100 mg/kg/day for 90days resulted in the formation of microgranulomas in the liver. This response was not observed in studies conducted with other rat strains or dogs. Microgranulomas like those observed in the Fisher344 rats have not been observed in humans.

Aspiration: Not an aspiration hazard.

Section 12: Ecological information

Ecotoxicity: Acute and chronic aquatic testing on lubricant base oils. Results indicate acute aquatic toxicities to fish, daphnia, ceriodaphnia and algal species of >1,000 mg/L using either water accommodated fractions or oil in water dispersions. Lubricate base oils mainly contain hydrocarbons having carbon numbers in the range of C15 to C50, it is predicted that acute toxicity would not be observed with these substances due to low water solubility. Results from chronic toxicity tests show that the no observed effect level (NOEL) usually exceeds 1,000 mg/L for lubricants base oils with the overall weight of experimental evidence leading to the conclusion that lubricant base oils do not cause chronic toxicity to fish and invertebrates.

Ecotoxicity

Product:



Toxicity to fish: Remarks: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Toxicity to daphnia and other aquatic invertebrates: Remarks: No data available

Toxicity to algae/aquatic plants: Remarks: No data available

Toxicity to microorganisms: Remarks: No data available

Components:

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Toxicity to fish: LC50 (Danio rerio (zebra fish)): > 100 mg/l

Exposure time: 96 h

Test Type: static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates:

EC50 (Daphnia magna (Water flea)): 51 mg/l

Exposure time: 48 h

Test Type: static test

Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants:

EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l

Exposure time: 72 h

Test Type: static test

Method: OECD Test Guideline 201

Persistence and degradability

Product:

Biodegradability: Remarks: No data available

Physio-chemical removability: Remarks: No data available

Components:

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Biodegradability:



aerobic
Inoculum: activated sludge
Result: Not rapidly biodegradable
Biodegradation: 1 %
Exposure time: 28 d
Method: OECD Test Guideline 301B
GLP: yes

Bio accumulative potential

Product:

Bioaccumulation: Remarks: This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT). This mixture contains no substance considered to be very.

Components:

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Partition coefficient: octanol/water: log Pow: > 5

Mobility in soil

Product:

Mobility: Remarks: No data available

Distribution among environmental compartments: Remarks: No data available

Section 13: Disposal considerations

Waste disposal method: Dispose of in accordance with all federal, state, and local laws.

RCRA hazard class: Not applicable

Section 14: Transportation information

DOT

NOT REGULATED

IATA

NOT REGULATED

IMDG

NOT REGULATED



Special precautions: Carefully read and consider all recommendations of the SDS before handling.

Transportation in bulk (Annex II of MARPOL73/78 and the IBC code): Not applicable

Section 15: Regulatory information

Inventory status(s):

TSCA (Toxic Substance Control Act): All components of this product are listed or comply with TSCA. Any impurities are not required to be listed.

CERCLA Hazardous Substance List: None listed.

SARA 311/ 312 hazardous chemical: Reproductive toxicity.

SARA 313: None listed.

WHMIS: Non-controlled.

Canada Lists:

None of the components are listed.

Canadian NPRI: None of the components are listed

CEPA Toxic substances: None of the components are listed

Canada inventory: CEPA Toxic substances: All components are listed or exempted

Section 16: Other information, including date of preparation or last revision



HMIS Hazard ID

Health	1
Flammability	1
Physical Hazards	0

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Preparation Date: 1/01/2018

Revision Date: 11/15/2022

Version number: 2.0

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