

SYNGEAR SH-1022

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SECTION 1. IDENTIFICATION

Product name : SYNGEAR SH-1022
Article-No. : 340454
Other means of identification : No data available

Manufacturer or supplier's details

Company name of supplier : Klüber Lubrication NA LP
9010 County Road 2120
Tyler, Texas 75707
USA
Phone: +1 903 534-8021
Fax: +1 903 581-4376

32 Industrial Drive
Londonderry, NH 03053
USA
Phone: +1 603 647-4104
Fax: +1 603 647-4106

E-mail address of person responsible for the SDS : mcm@us.kluber.com
Material Compliance Management

Emergency telephone number : +1-517-545-7070 NCEC

Recommended use of the chemical and restrictions on use

Recommended use : Lubricating oil
Restrictions on use : Restricted to professional users.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations

Not a hazardous substance or mixture.

GHS label elements

This chemical is not considered hazardous by the Canadian Hazardous Products Regulations (WHMIS 2015).

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Substance / Mixture : Mixture

Chemical nature : Synthetic hydrocarbon oil ester oil

Components

Chemical name	Common Name/Synonym	CAS-No.	Concentration (% w/w)
Distillates (petroleum), hydrotreated light paraffinic	Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	Trade secret** ($\geq 1 - < 5$ *)
1-Propene, 2-methyl-, sulfurized	1-Propene, 2-methyl-, sulfurized	68511-50-2	Trade secret** ($\geq 1 - < 5$ *)

* Actual concentration or concentration range is withheld as a trade secret

** See Section 15 for HMIRA information.

SECTION 4. FIRST AID MEASURES

If inhaled : Remove person to fresh air. If signs/symptoms continue, get medical attention.
Keep patient warm and at rest.
If unconscious, place in recovery position and seek medical advice.
Keep respiratory tract clear.
If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact : Take off all contaminated clothing immediately.
Wash off immediately with soap and plenty of water.
Get medical attention immediately if irritation develops and persists.
Wash clothing before reuse.
Thoroughly clean shoes before reuse.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.
If eye irritation persists, consult a specialist.

If swallowed : Move the victim to fresh air.
If unconscious, place in recovery position and seek medical advice.
Keep respiratory tract clear.
Do NOT induce vomiting.
Rinse mouth with water.
Never give anything by mouth to an unconscious person.

Most important symptoms : May cause an allergic skin reaction.

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and effects, both acute and delayed : Allergic appearance

Notes to physician : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : High volume water jet

Hazardous combustion products : Carbon oxides
Nitrogen oxides (NOx)
Sulphur oxides

Further information : Standard procedure for chemical fires.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. Exposure to decomposition products may be a hazard to health.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas. Use personal protective equipment. Ensure adequate ventilation. Do not breathe vapours or spray mist. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Try to prevent the material from entering drains or water courses. Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Do not breathe vapours or spray mist. Avoid contact with skin and eyes.

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For personal protection see section 8.
 Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
 Smoking, eating and drinking should be prohibited in the application area.
 Wash hands and face before breaks and immediately after handling the product.
 Do not get in eyes or mouth or on skin.
 Do not get on skin or clothing.
 Do not ingest.
 Do not repack.
 Do not re-use empty containers.
 These safety instructions also apply to empty packaging which may still contain product residues.
 Keep container closed when not in use.

Conditions for safe storage : Store in original container.
 Keep container closed when not in use.
 Keep in a dry, cool and well-ventilated place.
 Containers which are opened must be carefully resealed and kept upright to prevent leakage.
 Store in accordance with the particular national regulations.
 Keep in properly labelled containers.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	TWA (Mist)	5 mg/m ³	CA AB OEL (2009-04-30)
		STEL (Mist)	10 mg/m ³	CA AB OEL (2009-04-30)
		TWAEV (Mist)	5 mg/m ³	CA QC OEL (2012-11-28)
		STEV (Mist)	10 mg/m ³	CA QC OEL (2012-11-28)
		TWA (Mist)	1 mg/m ³	CA BC OEL (2012-04-20)
		TWA (Mist)	1 mg/m ³	CA BC OEL (2021-01-04)
		TWA (Inhalable particulate matter)	5 mg/m ³	ACGIH (2013-03-01)

Engineering measures : none

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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 break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.

Eye protection : Safety glasses with side-shields

Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures : Wash face, hands and any exposed skin thoroughly after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : yellow

Odour : characteristic

Odour Threshold : No data available

pH : Not applicable

Melting point/range : No data available

Boiling point/boiling range : No data available

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Flash point : ≥ 200 °C
Method: ISO 2592, open cup

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Self-ignition : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Vapour pressure : < 0.001 hPa (20 °C)

Relative vapour density : No data available

Relative density : 0.870 (20 °C)
Reference substance: Water
The value is calculated

Bulk density : No data available

Solubility(ies)
Water solubility : insoluble
Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity
Viscosity, dynamic : No data available
Viscosity, kinematic : 220 mm²/s (40 °C)

Explosive properties : Not explosive

Oxidizing properties : No data available

Sublimation point : No data available

SECTION 10. STABILITY AND REACTIVITY

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Reactivity : No hazards to be specially mentioned.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.

Conditions to avoid : No conditions to be specially mentioned.

Incompatible materials : No materials to be especially mentioned.

Hazardous decomposition products : No decomposition if stored and applied as directed.

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 : Symptoms: Redness, Local irritation

Components:

Distillates (petroleum), hydrotreated light paraffinic:

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

Acute inhalation toxicity : LC50 (Rat): > 5.53 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

Skin corrosion/irritation

Product:

Remarks : This information is not available.

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Components:

Distillates (petroleum), hydrotreated light paraffinic:

Species : Rabbit
Assessment : No skin irritation
Result : No skin irritation
GLP : yes

Serious eye damage/eye irritation

Product:

Remarks : This information is not available.

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Species : Rabbit
Result : No eye irritation
Exposure time : 48 h
Assessment : No eye irritation
Method : OECD Test Guideline 405
GLP : yes

Respiratory or skin sensitisation

Product:

Remarks : This information is not available.

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Test Type : Buehler Test
Species : Guinea pig
Assessment : Did not cause sensitisation on laboratory animals.
Method : OECD Test Guideline 406
Result : Did not cause sensitisation on laboratory animals.
GLP : no

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Germ cell mutagenicity - : Tests on bacterial or mammalian cell cultures did not show

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Assessment mutagenic effects.

Carcinogenicity

Product:

Remarks : No data available

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Reproductive toxicity - Assessment : - Fertility -
No toxicity to reproduction
- Teratogenicity -
No effects on or via lactation

Repeated dose toxicity

Product:

Remarks : This information is not available.

Aspiration toxicity

Product:

This information is not available.

Components:

Distillates (petroleum), hydrotreated light paraffinic:

May be fatal if swallowed and enters airways.

Further information

Product:

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

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish :
Remarks: No data available

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:

1-Propene, 2-methyl-, sulfurized:

Ecotoxicology Assessment

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Physico-chemical removabil- : Remarks: No data available
ity

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Biodegradability : Result: not rapidly degradable
Biodegradation: 31 %
Exposure time: 28 d

1-Propene, 2-methyl-, sulfurized:

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Biodegradability : Result: Not rapidly biodegradable

Bioaccumulative 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 persistent and very bioaccumulating (vPvB).

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Partition coefficient: n-octanol/water : Pow: > 6
Remarks: Information given is based on data obtained from similar substances.

1-Propene, 2-methyl-, sulfurized:

Partition coefficient: n-octanol/water : log Pow: > 5.1

Mobility in soil

Product:

Mobility : Remarks: No data available

Distribution among environmental compartments : Remarks: No data available

Other adverse effects

Product:

Additional ecological information : No information on ecology is available.

Components:

Distillates (petroleum), hydrotreated light paraffinic:

Results of PBT and vPvB assessment : Non-classified PBT substance Non-classified vPvB substance

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water

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courses or the soil.
Do not dispose of with domestic refuse.
Dispose of as hazardous waste in compliance with local and national regulations.

Contaminated packaging : Packaging that is not properly emptied must be disposed of as the unused product.
Dispose of waste product or used containers according to local regulations.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

TDG

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

NPRI Components : Canadian National Pollutant Release Inventory (NPRI): No component is listed on NPRI.

Canadian lists

No substances are subject to a Significant New Activity Notification.

No substances are subject to a Significant New Activity Notification.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
CA AB OEL : Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA BC OEL : Canada. British Columbia OEL



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CA QC OEL	:	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
ACGIH / TWA	:	8-hour, time-weighted average
CA AB OEL / TWA	:	8-hour Occupational exposure limit
CA AB OEL / STEL	:	15-minute occupational exposure limit
CA BC OEL / TWA	:	8-hour time weighted average
CA QC OEL / TWAEV	:	Time-weighted average exposure value
CA QC OEL / STEV	:	Short-term exposure value

AIIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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been compiled to the best of our knowledge and are based on the information available to us on the day of publication. The information provided is intended to describe the product in relation to the required safety measures; it is neither an assurance of characteristics nor a guarantee of the product's suitability for particular applications and does not justify any contractual legal relationship. The existence of a safety data sheet for a particular jurisdiction does not necessarily mean that import or use within that jurisdiction is legally permitted. If you have any questions, please contact your responsible sales contact or authorized trading partner.