

Material Safety Data Sheet

Trade Name	SHL COMPRESSOR 46N-1
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1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Trade Name	SHL COMPRESSOR 46N-1
General Characteristics	Petroleum hydrocarbon & additives
Hazard Classification	Harmful substance to inhalation
Application	Compressor oil
Manufacturer's Name & Address	SHL ASEAN CO., LTD. Address My Xuan B1-Connac Industrial Zone, My Xuan Ward, Phu My Town, Ba Ria - Vung Tau Province, Vietnam TEL 0254 3876 287 - FAX: 02543-876-288 Factory My Xuan B1-Connac Industrial Zone, My Xuan Ward, Phu My Town, Ba Ria - Vung Tau Province, Vietnam TEL 0254 3876 287 - FAX: 02543-876-288
Supplier's Name	SHL ASEAN CO., LTD.
Department	Technical Institute

2. HAZARD IDENTIFICATION

HAZARD CLASSIFICATION

Dermal Irritation. Category 2
Severe eye damage / irritation Category 2
Chronic aquatic environmental hazard Category 3

LABEL ELEMENTS

GHS Pictogram.



Signal Words

Warning

Hazard statements

H315 Causes skin irritation
H319 Causes severe eye irritation
H412 Harmful to aquatic organisms due to long-term effects.

Precautionary statement

Prevention

P264 Wash your hands thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P273 Avoid release to the environment.

Countermeasure

P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P321 First aid. (See item 4)
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash before reuse.
P305+P351+P338 If it gets on your eyes, wash it carefully with water for a few minutes. If possible, remove contact lenses.

Storage

No data

Disposal

P501 Dispose of the substance & containers according to the current rules and regulations.

OTHER HAZARDS

NFPA Index

Hydrotreated (mild) heavy paraffinic distillate : - Health-1,- Fire-1,- Reaction-0
Other ingredient : No data

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical identity	Synonyms	CAS No.	Concentration (%)
Hydrotreated (mild) heavy paraffinic distillate	Base oil	64742-54-7	> 98
Hydroxyalkyl carboxylic acid	No data	Secret	< 1
Alkyl methacrylate polymer	Alkyl methacrylate polymer	104199-42-0	< 0.5
N,N-Bis(2-ethylhexyl)-ar-methyl-1H-benzotriazole-1-methanamine	No data	94270-86-7	0.1 - 1
Secret 1	Secret	Secret	< 1
Secret 2	Secret	Secret	0.1 - 1

4. FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

Eye Contact

Get emergency medical attention.

Rinse skin and eyes immediately with plenty of water for at least 20 minutes when in contact with the material.

Skin Contact

Get emergency medical attention.

Remove contaminated clothing and shoes and isolate contaminated areas.

In contact with material, rinse skin and eyes immediately with running water for more than 20 minutes.

Prevent spread of contamination on mild skin contact

If skin irritation develops, seek medical advice and advice.

Remove contaminated clothing and wash before reuse.

Inhalation

Move to a place with fresh air.

If not breathing, give artificial respiration.

If breathing is difficult, give oxygen.

Please warm and stabilize.

Ingestion

Get emergency medical attention.

Advice to Physician

If necessary, gastrolavage should be considered.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Extinguishing Media Dry chemical, carbon dioxide, water, normal foam

Unsuitable Extinguishing Media : No data

Hazardous Substance Created during Burning

Smoke, Fume, Incomplete combustion products, Oxides of carbon

Extinguishing Method and Extinguisher

Evacuate area.

Shut off all sources of fuel if possible, and use water to cool fire-exposed materials.

Use water to cool fire-exposed tanks, containers, and structures.

Fight horizontal tank fires from side of the tank.

Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA).

Use water spray to cool fire exposed surfaces and to protect personnel.

Use foam if exposed to heat or flame.

FIRE FIGHTING INSTRUCTIONS

Flash Point [Method]: 254 °C (ASTM D92)

Upper/Lower Flammable Limits (Approximate volume % in air): No data

Autoignition Temperature: No data

6. ACCIDENT RELEASE MEASURES

Human Body Protection Methods

Avoid inhalation and skin exposure.

Change pollutant clothes to new one.

Wear air respirator or ventilate the air in an airtight room.

Shut off source of exposure or remove source of fire.
In case of inadequate ventilation wear respiratory protection.

Environment Protection Methods

Do not directly expose the substance to nature.
Dispose the substance as wastewater to prevent water pollution.
If the area is polluted, eliminate the substance by using absorbent.

Clean Up Methods

Use sand or noninflammable absorber.
Use water to dilute gas.
Collect exposed materials in a proper container to dispose them.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Wash your hands and body thoroughly after handling.
Avoid contact with skin. Prevent small spills and leakage to avoid slip hazard.
Do not heat, pressurise, cut, weld, braze, drill, grind empty containers
Thus, do not work near empty containers.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Use only outdoors or in a well-ventilated area.
Keep containers closed when not in use.
Do not use compressed air for filling, discharging or handling.

Loading/Unloading Temperature: Ambient

Transport Temperature: Ambient

Transport Pressure: Ambient

CONDITIONS FOR SAFE STORAGE

Store the substance according to the current rules and regulations.
Store the substance in a cool and well-ventilated area.
Seal the storage container up and do not have a physical impact on the container.

Storage Temperature: Ambient

Storage Pressure: Ambient

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMIT

Chemical identity	Exposure limit in KOREA	ACGIH control acts	Biological exposure limit
Hydrotreated heavy paraffinic distillate	No data	5 mg/m ³ for mineral oil mist	No data
Other ingredients	No data	No data	No data

ENGINEERING CONTROLS

Adequate ventilation in accordance with good engineering practice must be provided to keep any oil mist concentration below the PEL.

Check if the exposure is proper within the exposure criteria.

PERSONAL PROTECTION

Respiratory Protection

Not required under normal usage.

If product is handled in such a way as to create a vapor or mist, approved respirator should be used to prevent overexposure. Use either a full-face, atmospheresupplying respirator or an air-purifying respirator for organic vapors.

Eye Protection

Wear chemical goggles to prevent eye contact from scattering materials or harmful liquids.

Install spray washing system for eyes near the work field.

Hand Protection

Wear chemical-resistant gloves, if needed.

Body Protection

Wear chemical-resistant protective clothing.

9. PHYSICAL AND CHEMICAL INFORMATION

Appearance	Pale yellow transparent liquid
Odor	Unique hydrocarbon odor
pH	N/A

Melting Point	< -30 °C
Boiling point	No data
Flash Point	254 °C (ASTM D92)
Oxidation	Stable
Flammability	Stable
Explosion	Stable
Vapor Pressure	No data
Solubility In Water	Insoluble in water
Vapor Density	> 1 (Air=1)
Specific Gravity	0.85 (15/4 °C)
Distribution Coefficient	No data
Autoignition Temp.	No data
Dissolution Temp.	No data
Viscosity	43 cSt (40 °C)
Molecular weight	No data

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY

Stable in normal temperature and pressure, and for normal usage

POSSIBILITY OF HAZARDOUS REACTIONS

Will not occur.

CONDITIONS & MATERIALS TO AVOID

Strong oxidants

HAZARDOUS DECOMPOSITION PRODUCTS

Thermal decomposition product. Toxic carbon compounds may be included (e.g. CO).

11. TOXICOLOGICAL INFORMATION

URGENT RISK & HARMFULNESS INFORMATION

Inhalation

Inhalation of vapors may cause irritation of the respiratory tract and cough, dyspnea, drowsiness, dizziness, headache and nausea

Eye Contact

May cause irritation.

Skin Contact

May cause slight irritation. Repeated contact may result in skin troubles

Ingestion

Ingestion may result in irritation, vomiting, diarrhea, stomachache

TOXICOLOGICAL INFORMATION

Acute Oral Toxicity

Hydrotreated (mild) heavy paraffinic distillate LD50 > 15000mg/kg Rat

Secret 1 LD50 > 2000mg/kg Rat

Other Ingredient No data

Acute Dermal Toxicity

Hydrotreated (mild) heavy paraffinic distillate LD50 > 5000mg/kg Rat

Secret 1 LD50 > 2000mg/kg Rat

Other Ingredient No data

Acute Inhalation Toxicity

Hydrotreated (mild) heavy paraffinic distillate LC50 2.18mg/L/4hr Rat (Mist)

Secret 1 LD50 > 2000mg/kg Rat

Other Ingredient No data

Dermal Irritability May cause mild irritation

Eye Irritability May cause mild irritation

Subacute Toxicity No data

Repeated Dose Toxicity No data

Mutagenicity No data

Effect on Next Generation (Reproductive Toxicity)	No data
Carcinogenicity	Not applicable(less than 3% DMSO extract as measured by the IP346 method)

12. ECOLOGICAL INFORMATION

AQUATIC TOXICITY AND ECOTOXICITY

Chronic and Aquatic Toxicity

This material may be slightly toxic to aquatic organisms.

MOBILITY

Lubricant mineral oils, immediately following a release into the environment, will remain largely on the soil surface, on the water surface and in the water.

BIODEGRADABILITY

Hydrotreated (mild) heavy paraffinic distillate : 6 (%) 28 day (aerobic, domestic sewage, not easily degradable)

POSSIBILITY OF BIOACCUMULATION : Not measured

13. DISPOSAL CONSIDERATION

REGULATION OF WASTE MANAGEMENT ACT

Classified as specified wastes.

WASTE DISPOSAL METHODS

Dispose in a legal self-disposal system or through waste disposal company.

CAUTION FOR DISPOSAL

Follow the detailed criteria of Wastes Control Act.

Empty Container Warning

Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations.

14. TRANSPORT INFORMATION

Classification and Regulation According to Ship Transportation and Storage Rule of Hazardous Material of Ship Safety Act

Not Regulated

Caution during Transport

No data

Marine pollutant : No data

Classification and Regulation According to Rule of Foreign Transportation

Not Regulated for transport according to UN, IMDG, ADR/RID, IATA/ICAO codes

15. REGULATORY INFORMATION

Chemical Control Act N/A

High-Pressure Gas Safety Control Act N/A

Wastes Control Act Classified as specified wastes.

Act on Safety Management of Dangerous Goods

No regulated

Regulation According to Foreign Laws

USA : CERCLA 103(40CFR302.4) : N/A

OSHA(29CFR1910.119) : N/A

SARA 302(40CFR355.30) :N/A

SARA 304(40CFR355.40) :N/A

SARA 313(40CFR372.65) : N/A

OSHA(29CFR1910.119) : N/A

16. OTHER INFORMATION

Source

Material's data of our laboratories, Korea Occupational Safety & Health Agency and raw material supplier

Written Date

4-Feb-14

Revision Count. Final Revision Date

Rev. 2

17-May-17

Other References

The information and recommendations contained herein are, to the best of our's knowledge and belief, accurate and reliable as of the date issued. The information and recommendations are offered for the user's consideration and examination. It is the user's responsibility to satisfy itself that the product is suitable for the intended use. If buyer repackages this product, it is the user's responsibility to insure proper health, safety and other necessary information is included with and/or on the container. Appropriate warnings and safe-handling procedures should be provided to handlers and users. Alteration of this document is strictly prohibited. Except to the extent required by law, re-publication or retransmission of this document, in whole or in part, is not permitted. If you have purchased the product for supply to a third party for use at work, it is your duty to take all necessary steps to secure that any person handling or using the product is provided with the information in this sheet. If you are an employer, it is your duty to tell your employees and others who may be affected of any hazards described in this sheet and of any precautions which should be taken.