Material Safety Data Sheet

Trade Name SHL MTF 80W90IV

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Trade Name SHL MTF 80W90IV

General Characteristics Petroleum hydrocarbon & additives

Hazard Classification Harmful substance to inhalation

Application Transmission oil

Manufacturer's Name & Address

SHL ASEAN CO., LTD.

Address: My Xuan B1-Conac Industrial Zone, My Xuan Ward, Phu My Town, Ba Ria Vung Tau Province,

Vietnam.

TEL: +84(0) 2543 876 287 - Fax: +84(0) 2543 876 288

Supplier's Name SHL ASEAN CO., LTD.

Department Technical Institute

2. HAZARD IDENTIFICATION

HAZARD CLASSIFICATION Skin corrosion / irritation: Category 2

LABEL ELEMENTS

GHS Pictogram.

Signal Words Warning

Hazard statements H315: Causes skin irritation

Precautionary statement

Prevention

P264: Wash ... thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P270: Do not eat, drink or smoke when using this product.

Countermeasure

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, ifpresent and easy to do. Continue rinsing

P362+P364: Remove contaminated clothing and wash before reuse

P301+P312: If swallowed and feel uncomfortable, seek medical advice (doctor).

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable

for breathing.

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

Storage

P405: Store locked up.

Disposal

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

OTHER HAZARDS

NFPA Index

Hydrotreated Heavy Paraffinic Distillate: Public health: 1, Fire: 1, Reaction: 0

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical identity | Synonyms | CAS No. | Concentration (%) |
|--|---------------------|------------|-------------------|
| Hydrotreated heavy (light) paraffinic distillate | Base oil | 64742-54-7 | >90 |
| Mixed Performance Additive | Additive Mixture | Secret | 1-5 |
| Polymer Esters of Methacrylic Acid and Mixed long chain Alcohols | Additive Mixture | Secret | <2 |

4. FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

Eye Contact

Open the eyelid and wash the eye with water over 15 minutes.

If the eye is bloodshot and the congestion maintains continuously, receive medical treatment immediately

Move person to fresh air

Skin Contact

Wash thoroughly with soap and water.

Take off contaminated clothing and wash before reuse.

If the irritation maintains on the skin continuously, receive medical treatment.

Inhalation

Expose to fresh air. If not recovered, seek medical aid.

If breathing has stopped, apply artificial respiration and administer oxygen if necessary.

Ingestion

If swallowed much amount, receive medical treatment Immediately.

Advice to Physician

If necessary, gastrolavage should be considered.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Suitable Extinguishing Media: Dry chemical, carbon dioxide, water fog, normal foam

Unsuitable Extinguishing Media: Straight streams of water

HAZARDOUS SUBSTANCE CREATED DURING BURNING

Smoke, Fume, Incomplete combustion products, Oxides of carbon

Extinguishing Method and Extinguisher

Evacuate area.

Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply.

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.

Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing

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

Use foam if exposed to heat or flame.

FLAMMABILITY PROPERTIES

Flash Point [Method]: 250 °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 if possible.

Environment Protection Methods

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

Prevent skin contact, vapor inhalation, and eye contact.

Empty containers may retain product residue including flammable or explosive vapors.

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 (light) paraffinic distillate | No data | 5 mg/m³ for mineral oil | No data |
| Mixed Performance Additive | No data | No data | No data |
| Polymer Esters of Methacrylic Acid and Mixed long chain Alcohols | 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.

Respirator shall be certified by Korea Occupational Safety & Health Agency.

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

9. PHYSICAL AND CHEMICAL INFORMATION

Appearance Yellow transparent liquid

Odor Unique hydrocarbon odor

pH N/A

Melting Point < -24.0 °C

Boiling point No data

Flash Point 250 °C (ASTM D92)

OxidationStableFlammabilityStableExplosionStable

Vapor Pressure < 0.1 mmHg @20 °C

Solubility In Water Unsoluble in water

Vapor Density > 1 (Air=1)

Specific Gravity $0.87 (15/4 ^{\circ}\text{C})$

Distribution CoefficientNo dataAutoignition Temp.No dataDissolution Temp.No data

Viscosity 128.4 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

All sources of ignition and excessive heat, and 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

No data

Eye Contact

No data

Skin Contact

No data

Ingestion

No data

TOXICOLOGICAL INFORMATION

Acute Oral Toxicity

Hydrotreated paraffinic distillate : LD50 > 5000 mg/kg Rat

Other ingredients: No data

Acute Dermal Toxicity

Hydrotreated paraffinic distillate : LD50 > 5000 mg/kg Rabbit

Other ingredients: No data

Acute Inhalation Toxicity

No data

Dermal Irritability No data

Eye Irritability No data

Subacute Toxicity No data

Repeated Dose ToxicityNo data

Mutagenicity N/A

Effect on Next Generation N/A

Carcinogenicity N/A (<3% (DMSO extract))

ADDITIONAL ADVICE Repeated exposure may decrease the fat of skin and result in

dormatitio

12. ECOLOGICAL INFORMATION

AQUATIC TOXICITY AND ECOTOXICITY

Chronic and Aquatic Toxicity

Harmful to aquatic life with long lasting effects.

MOBILITY IN SOIL

 $\log Kow = 3.9 \sim 6$ (Estimates)

PERSISTENCE / DEGRADABILITY

6% degradable during 28 days. (Hydrotreated heavy paraffinic distillate)

This product is expected to be resistant to biodegradation and to persist in the environment.

POSSIBILITY OF BIOACCUMULATION: No data

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 appropriately 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.

DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION.

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

Regulation According to the Substance Control Act of Another Department such as Toxic

Substance Control Act: N/A

Toxic Substance Control Act N/A

High-Pressure Gas Safety N/A

Control Act

Act on Safety Management of Dangerous Goods

Not classified as dangerous goods

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

16. OTHER INFORMATION

Source

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

15-Jun-21

Written Date 24-Feb-21

Revision Count. Final Revision

Date Rev. 1

Other References

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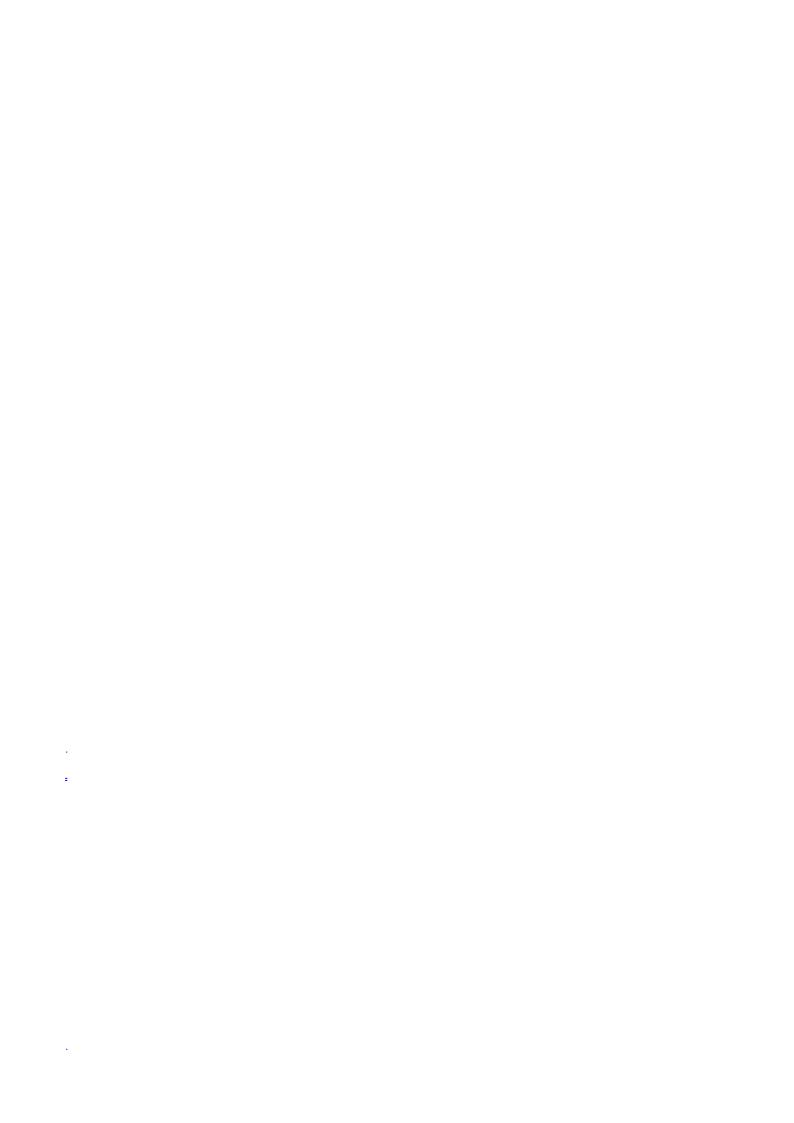
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