# SAFETY DATA SHEET

## SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT**

**Product Name:** 150N Base oil
**Product Description:** Hydrotreated heavy paraffinic mineral oil
**Intended Use:** Base oil、Lubricant

**COMPANY IDENTIFICATION**

**Supplier: FORMOSA PETROCHEMICAL CORPORATION**
FORMOSA INDUSTRIAL PARK NO.15
MAI-LIAO YUN-LIN TAIWAN,R.O.C
**Product Technical Information** +886-5-6815621

## SECTION 2 HAZARDS IDENTIFICATION

**CLASSIFICATION:** Acute toxicity hazard Category 5(Oral;Dermal;Inhalation)
**Label content:**
**Symbol sign**:NO
**Warning Alert :** Warning
Hazard Statements: -
PHYSICAL / CHEMICAL HAZARDS: No significant hazards.
HEALTH HAZARDS: High-pressure injection under skin may cause serious damage. Excessive exposure may result in eye, skin, or respiratory irritation.
ENVIRONMENTAL HAZARDS: No significant hazards.

**NOTE:** This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

| COMPONENTS | CAS NUMBER | AMOUNT |
|---|---|---|
| Hydrotreated heavy paraffinic mineral oil | 64742-54-7 | 100% |

This product is not formulated to contain ingredients which have exposure limits established by U.S. agencies. It is not hazardous to health as defined by the European Union Dangerous Substances/Preparations Directives.
See Section 15 for a regulatory analysis of the ingredients.

**PHYSICAL / CHEMICAL HAZARDS**

No significant hazards.

**Health Hazards**

Excessive exposure may result in eye, skin, or respiratory irritation.

**ENVIRONMENTAL HAZARDS**

No significant hazards.

**Note:** This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

## SECTION 4 FIRST AID MEASURES

**INHALATION**

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection.If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance.If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

**SKIN CONTACT**

Wash contact areas with soap and water. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

**EYE CONTACT**

Flush thoroughly with water. If irritation occurs, get medical assistance.

**INGESTION**

Seek immediate medical attention. Do not induce vomiting.

**NOTE TO PHYSICIAN**

If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

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## SECTION 5 FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA**

**Appropriate Extinguishing Media:** Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

**Inappropriate Extinguishing Media:** Straight Streams of Water

**FIRE FIGHTING**

**Fire Fighting Instructions:** Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters 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.
**Hazardous Combustion Products:** Aldehydes, Oxides of carbon, Incomplete combustion products, Smoke, Fume, Sulfur oxides

**FLAMMABILITY PROPERTIES**

**Flash Point [Method]:** >230℃(446℉) [ ASTM D-92]

**Flammable Limits (Approximate volume % in air):** LEL:0.6 UEL:7.0
**Autoignition Temperature:** N/D

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**NOTIFICATION PROCEDURES**

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

**PROTECTIVE MEASURES**

Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required due to toxicity or flammability of the material.See Section 5 for fire fighting information.See the Hazard Identification Section for Significant Hazards.See Section 4 for First Aid Advice.See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

For emergency responders:Respiratory protection: respiratory protection will be necessary only in special cases, e.g., formation of mists. Half-face or full-face respirator with filter(s) for dust/organic vapor or Self Contained Breathing Apparatus (SCBA) can be used depending on the size of spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended.Work gloves that are resistant to hydrocarbons are recommended.Gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use.Chemical goggles are recommended if splashes or contact with eyes is possible.Small spills: normal antistatic work clothes are usually adequate.Large spills: full body suit of chemical resistant, antistatic material is recommended.

**SPILL MANAGEMENT**

**Land Spill:**Stop leak if you can do it without risk. Recover by pumping or with suitable absorbent.
**Water Spill:**Stop leak if you can do it without risk.Confine the spill immediately with booms.Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.
Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

**ENVIRONMENTAL PRECAUTIONS**

Large Spills:Dike far ahead of liquid spill for later recovery and disposal.Prevent entry into waterways, sewers, basements or confined areas.

## SECTION 7 HANDLING AND STORAGE

**HANDLING:** Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). When the material is handled in bulk, an electrical spark could ignite any flammable vapors from liquids or residues that may be present (e.g., during switch-loading operations). Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation.

**Static Accumulator:**This material is a static accumulator

**STORAGE:** The container choice, for example storage vessel, may effect static accumulation and dissipation. Do not store in open or unlabelled containers.

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

**EXPOSURE LIMIT VALUES**

**Exposure limits/standards (Note: Exposure limits are not additive)**

| Substance Name | Form | Limit / Standard | | | NOTE | Source |
|---|---|---|---|---|---|---|
| Hydrotreated heavy paraffinicmineral oil | Mist. | TWA | N/D | | -- | -- |
| Hydrotreated heavy paraffinic mineral oil | Inhalable fraction. | TWA | N/D | | -- | -- |

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**ENGINEERING CONTROLS**

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:
No special requirements under ordinary conditions of use and with adequate ventilation.

**PERSONAL PROTECTION**

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

**Respiratory Protection:**If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

No special requirements under ordinary conditions of use and with adequate ventilation. For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

**Hand Protection:** Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

No protection is ordinarily required under normal conditions of use.

**Eye Protection:**If contact is likely, safety glasses with side shields are recommended.

**Skin and Body Protection:** Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial

hygiene practices, precautions should be taken to avoid skin contact.

**Specific Hygiene Measures:**Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

**ENVIRONMENTAL CONTROLS**

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Typical physical and chemical properties are given below. Consult the Supplier in Section 1 for additional data.**

**GENERAL INFORMATION**

**Physical State:** Liquid
**Color:** Colorless
**Odor:** Mild
**Odor Threshold:** N/E

**IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION**

**Relative Density (at 15 C ):** 0.85

**Flash Point [Method]:** ≒230~240℃(446℉~464℉) [ ASTM D-92]

**Flammable Limits (Approximate volume % in air):** LEL: 0.6 UEL: 7.0

**Autoignition Temperature:N/D**

**Boiling Point / Range:** >330℃ (626℉)

**Vapor Density (Air = 1):** N/E

**Vapor Pressure:** <0.1 mm Hg at 20℃(68℉)

**Evaporation Rate (n-butyl acetate = 1):** N/D

**pH:** N/A

**Log Pow (n-Octanol/Water Partition Coefficient):** NE

**Solubility in Water:** Soluble in hydrocarbons; insoluble in water

**Viscosity:** ≒30 cSt at 40℃ (104℉)

**OTHER INFORMATION**

**Freezing Point:** N/D

**Melting Point:** N/A

**Pour Point:** <-15°C(5℉)

## SECTION 10 STABILITY AND REACTIVITY

**REACTIVITY:** See sub-sections below.

**STABILITY:** Material is stable under normal conditions.

**CONDITIONS TO AVOID:** Excessive heat. High energy sources of ignition.

**MATERIALS TO AVOID:** Strong oxidizers

**HAZARDOUS DECOMPOSITION PRODUCTS:** Material does not decompose at ambient temperatures.

**POSSIBILITY OF HAZARDOUS REACTIONS:** Hazardous polymerization will not occur.

## SECTION 11 TOXICOLOGICAL INFORMATION

**Acute Toxicity**

| Route of Exposure | Conclusion / Remarks |
|---|---|
| **INHALATION** | |
| Toxicity (Rat): LC50 > 5000 mg/m3 | Minimally Toxic. Based on test data for structurally similar materials. |
| Irritation: No end point data. | Negligible hazard at ambient/normal handling temperatures. Base on assessment of the components. |
| | |
| **Ingestion** | |
| Toxicity (Rat): LD50 > 5000 mg/kg | Minimally Toxic. Based on test data for structurally similar materials. |
| | |
| **Skin** | |
| Toxicity (Rabbit): LD50 > 5000 mg/kg | Minimally Toxic. Based on test data for structurally similar materials. |
| Irritation (Rabbit): Data available. | Negligible irritation to skin at ambient temperatures. Based on test data for structurally similar materials. |
| | |
| **Eye** | |
| Irritation (Rabbit): Data available. | May cause mild, short-lasting discomfort to eyes. Based on test data for structurally similar materials. |

**OTHER INFORMATION**
**For the product itself:**
Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.
Base oil severely refined:Not carcinogenic in animal studies.

## SECTION 12 ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

**ECOTOXICITY :**Material -- Not expected to be harmful to aquatic organisms.

**MOBILITY** :Material -- Low solubility and floats and is expected to migrate from water to the land.
Expected to partition to sediment and wastewater solids.
Material -- Low potential to migrate through soil.

**PERSISTENCE AND DEGRADABILITY**
**Biodegradation:** Material -- Expected to be inherently biodegradable

**BIOACCUMULATION POTENTIAL** : Material -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

## SECTION 13 DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

**DISPOSAL RECOMMENDATIONS**

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products. Protect the environment. Dispose of used oil at designated sites. Minimize skin contact. Do not mix used oils with solvents, brake fluids or coolants.

**REGULATORY DISPOSAL INFORMATION**

RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

**Empty Container Warning** Empty Container Warning (where applicable): 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 HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

## SECTION 14 TRANSPORT INFORMATION

**LAND (DOT):** Not Regulated for Land Transport

**LAND (TDG):** Not Regulated for Land Transport

**SEA (IMDG):** Not Regulated for Sea Transport according to IMDG-Code

**Marine Pollutant:** No

**AIR (IATA):** Not Regulated for Air Transport

## SECTION 15 REGULATORY INFORMATION

**This material is not considered hazardous according to The Regulations on Labelling and Hazard Communications for Hazardous Materials.**

**REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS**
Toxic Chemical Substances Control Act (TCSCA): Not Regulated

**Listed or exempt from listing/notification on the following chemical inventories:** AICS, DSL, ENCS, IECSC, ISHL, KECI, PICCS, TCSI, TSCA

## SECTION 16 OTHER INFORMATION

| | | |
|---|---|---|
| **Organization that prepared the SDS** | Name:Environmental Health and Safety Team, Refinery Division, Formosa Petrochemical | |
| | Add/Tel: No. 15, Formosa Industrial Complex, Mailiao Village, Yunlin Country +886-5-6815623 | |
| **Person who prepared the SDS** | Title：<br>Safety Engineer | Name (signature): Yi-Ming Wang |
| **Date that the SDS was prepared** | **May.21,2025(M/D/Y)** | |
| **Notation** | The symbol "—" of above represents there are no related information at the present. And the symbol " ***I*** " represents that column is unsuitable for the substance. | |

**The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.**