**Safety Data Sheet: Signal Film 150**

**Revision Date: January 2nd 2022**

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| SECTION 1                                              PRODUCT AND COMPANY IDENTIFICATION |

**PRODUCT**

 **Product Name:** Signal Film 150

 **Product Description:** Base Oil and Additives

 **Intended Use:** Corrosion protection fluid

**COMPANY IDENTIFICATION**

 **Supplier:** Beacon Lubricants

 P.O Box 754

 Edinboro, PA 16412

**Emergency Telephone:** 1-877-734-7334 – Beacon Lubricants, Inc.
**Emergency Telephone:** 1-800-424-9300 (24 hours) – Chemtrec approval

**Website:** www.beaconlubricants.com

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| SECTION 2                                                HAZARDS IDENTIFICATION  |

Hazard Classification

 Physical Hazards

 Flammable liquids Category 3

Health Hazards

 Seriously Eye Damage/Irritation Category 2A

 Specific Target Organ Toxicity- Repeated Exposure Category 1

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| SECTION 3                                      COMPOSITION / INFORMATION ON INGREDIENTS |

This material is defined as a mixture.

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| --- | --- | --- | --- |
| Name | CAS # | Concentration\* | GHS Hazard Codes |
| HYDRO TREATED MIDDLE DISTILLATE (PETROLEUM) | 64742-46-7 | 20 - < 30 % | H304, H401, H411 |
| SOLVENT REFINDED HEAVY PARAFFINIC DISTILLATE (PETROLEUM) | 64741-88-4 | 70 - < 80 % | H304 |

\*All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions.

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| 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. Remove contaminated clothing. Launder contaminated clothing before reuse. 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

**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  |

 **General Fire Hazards:** Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

**Suitable (and suitable) extinguishing media**

**Suitable extinguishing media:** CO2, Dry chemical, or Foam. Water can be used to cool and protect exposed material.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:** Vapors may cause a flash fire or ignite explosively. Prevent buildup of vapors or gases to explosive concentrations. Vapors may travel considerable distance to a source of ignition and flash back. Water may cause splattering. Container may rupture on heating. A solid stream of water will spread the burning material. Material creates a special hazard because it floats on water. See section 10 for addition information.

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| SECTION 6                                                           ACCIDENTAL RELEASE MEASURES  |

Personal precautions, protective equipment, and emergency procedures: Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area.) Keep upwind. Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations.

Methods and material for containment and cleaning up: Eliminate all ignition sources if safe to do so. Dike far ahead of larger spill for later recovery and disposal. Pick up free liquid for recycle and/or disposal.

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| SECTION 7                                                HANDLING AND STORAGE  |

 **HANDLING**

Avoid breathing mists or vapors. Avoid contact with skin. Avoid contact with eyes. Small metal particles from machining may cause abrasion of the skin and may predispose to dermatitis. 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 ground may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity).

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

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

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| SECTION 8                                      EXPOSURE CONTROLS / PERSONAL PROTECTION |

**EXPOSURE LIMIT VALUES**

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

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| --- | --- | --- | --- | --- |
| **Substance Name** | **Form** | **Limit/Standard** | **NOTE** | **Source** |
| HYDRO TREATED MIDDLE DISTILLATE (PETROLEUM) | Mist. | TWA | 5mg/m3 |  | N/A | OSHA Z1 |
| HYDRO TREATED MIDDLE DISTILLATE (PETROLEUM) |  | TWA | 5mg/m3 |  | N/A | ExxonMobil |
| HYDRO TREATED MIDDLE DISTILLATE (PETROLEUM) | Inhalable fraction | TWA | 5mg/m3 |  | N/A | ACGIH |
| SOLVENT REFINED HEAVY PARAFFINIC DISTILLATE (PETROLEUM) | Mist | TWA | 5mg/m3 |  | N/A | OSHA Z1 |
| SOLVENT REFINED HEAVY PARAFFINIC DISTILLATE (PETROLEUM) |  | TWA | 2000 mg/m3 | 500 ppm | N/A | OSHA Z1 |
| SOLVENT REFINED HEAVY PARAFFINIC DISTILLATE (PETROLEUM) | Inhalable fraction | TWA | 5mg/m3 |  | N/A | ACGIH |
| SOLVENT REFINED HEAVY PARAFFINIC DISTILLATE (PETROLEUM) | Mist | TWA | 5mg/m3 |  | N/A | ACGIH |

**Exposure limits/standards for materials that can be formed when handling this product:** When mists/aerosols can occur, the following is recommended: 5 mg/m3 - OSHA PEL.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

No biological limits allocated.

**ENGINEERING CONTROLS**

The level of protection and toes 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 of 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 levee 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:
Particulate air-purifying respirator approved for dust / oil mist is recommended.

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 filters 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 manufacture 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 glass with side shields is recommended. Chemical type goggles should be worn during misting operations.

**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.

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| SECTION 9                                                PHYSICAL AND CHEMICAL PROPERTIES |

 **Note: Physical and chemical properties are provided for safety, health, and environmental considerations only and may not fully represent product specifications. Contact the supplier for additional information.**

**GENERAL INFORMATION**
**Physical State:** Liquid
**Color:** Brown
**Odor:** Characteristic
**Odor Threshold:** N/D

**IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION**
**Relative Density (at 15°C):** 0.85
**Flammability (Solid, Gas):** N/A
**Flash Point [Method]:** >170°C (338°F) [ASTM D-92]
**Flammable Limits (Approximate volume % in air):** LEL: 0.9 UEL: 7.0
**Autoignition Temperature:** N/D
**Boiling Point / Range:** >316°C (600°F)
**Decomposition Temperature**: N/D
**Vapor Density (Air = 1):** > 2 at kPa (0.1 mm Hg) at 20°C
**Vapor Pressure:** < 0.013 kPa (0.1 mm Hg) at 20 °C
**Evaporation Rate (n-butyl acetate = 1):** N/D
**pH:** N/A
**Log Pow (n-Octanol/Water Partition Coefficient):** N/D
**Solubility in Water:**   Negligible
**Viscosity:** 15 cSt (15 mm2/sec) at 40°C | > 3.5 cSt (3.5 mm2/sec) at 100°C
**Oxidizing Properties:** See Hazards Identification Section.

**OTHER INFORMATION**
**Freezing Point:** N/D
**Melting Point:** N/A
**Pour Point:** -20°C (0°F)

**DMSO Extract (mineral oil only), IP-346:** < 3 % wt

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| 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.

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| SECTION 11                                                   TOXICOLOGICAL INFORMATION |

 **INFORMATION ON TOXICOLOGICAL EFFECTS**

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| **Hazard Class** | **Conclusion / Remarks** |
| **Inhalation** |   |
| Acute Toxicity: No end point data for material. | Minimally Toxic. Based on the assessment of the components. |
| Irritation: No end point data for material. | Negligible hazard at ambient/normal handling temperatures. |
| **Ingestion** |   |
| Acute Toxicity: No end point date for material | Minimally Toxic. Based on assessment of components.  |
| **Skin** |   |
| Acute Toxicity: No end point date for material | Minimally Toxic. Based on assessment of components. |
| Skin Corrosion/Irritation: No end point data for material. | Negligible irritation to skin at ambient temperatures. Based on assessment of the components. |
| **Eye** |   |
| Serious Eye Damage/Irritation: No end point data for material | May cause mild, short-lasting discomfort to eyes. Based on assessment of components. |
| **Sensitization** |   |
| Respiratory Sensitization: No end point data for material | Not expected to be a respiratory sensitizer |
| Skin Sensitization: No end point date for material | Not expected to be a skin sensitizer. Based on assessment of the components. |
| **Aspiration:** Date available | Not expected to be an aspiration hazard. Based on physico-chemical properties of the materials. |
| **Germ Cell Mutagenicity:** No end point data for material | Not expected to be a germ cell mutagen. Based on assessment of the components. |
| **Carcinogenicity:** No end point data for material | Not expected to cause cancer. Based on assessment of the components. |
| **Reproductive Toxicity:** No end point data for material | Not expected to be a reproductive toxicant. Based on the assessment of the components |
| **Lactation:** No end point data for material | Not expected to cause harm to breast-fed children |
| **Specific Target Organ Toxicity (STOT)** |   |
| Single Exposure: No end point data for material | Not expected to cause organ damage from a single exposure |
| Repeated Exposure: No end point data for material | Not expected to cause organ damage from prolonged or repeated exposure. Based on assessment of the components. |

**TOXICITY FOR SUBSTANCES**

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| **NAME** | **ACUTE TOXICITY** |
| FATTY ACIDS, TALL-OIL COMPDS. WITH ETHANOLAMINE | Oral Lethality: LD50 > 2 g/kg (Rat) |

**OTHER INFORMATION**

**For the product itself:** Repeated and/or prolonged exposure may cause irritation to the skin, eyes, or respiratory tract. Oil Mist (highly refined oils): Animals exposed to high concentrations of mist developed oil retention, inflammation, and oil granulomas in the respiratory tract. Oils exposed to high temperatures, cracking conditions, or mixing with tramp / used oils may introduce polycyclic aromatic compounds or microbial contaminants that could result in cancer or severe respiratory hazards.

**Contains:**

Base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346, Modified Ames test, and/or other screening tests. Dermal and inhalation studies showed minimal effects, lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation. Not sensitizing in test animals.

**The following ingredients are cited on the lists below: None.**

--REGULATORY LISTS SEARCHED--
1 = NTP CARC 3 = IARC 1 5 = IARC 2B
2 = NTP SUS 4 = IARC 2A 6 = OSHA CARC

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| 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 — Expected to be harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

**MOBILITY**

Base oil component—Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

**PERSISTENCE AND DEGRADABILITY
Biodegradation:**
Base Oil Components— Expected to be inherently biodegradable

**BIOACCUMULATION POTENTIAL**

Components — Has the potential to bioaccumulate, hover metabolism or physical properties may reduce the bio concentration or limit bioavailability

 **OTHER ECOLOGICAL INFORMATION**

**VOC:** 15.9 G/L [ASTM E1868-10]

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| SECTION 13                                                 DISPOSAL CONSIDERATIONS |

Disposal recommendations based on material as supplied. Disposal must be in accordance 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.

**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 reside 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 PRESSURIZE, 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 INJUST OR DEATH.

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| 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

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| SECTION 15                                                    REGULATORY INFORMATION |

**OSHA HAZARD COMMUNICATION STANDARD:** This material is considered hazardous in accordance with OHSA HazCom 2012, 29, CFR 1910. 1200.

**Complies with the following national/regional chemical inventory requirements:** AICS, ENCS, IECSC, KECI, PICCS, TSCA

**Special Cases:**

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| **Inventory** | **Status** |
| NDSL | Restrictions Apply |

 **EPCRA SECTION 302:** This material contains no extremely hazards substances.

**SARA (311/312) REPORTABLE HAZARD CATEGORIES:** Immediate Health. Delayed Health.

**SARA (313) TOXIC RELEASE INVENTORY:** This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.

**The following ingredients are cited on the lists below: None**

--REGULATORY LISTS SEARCHED—

1 = ACGIH ALL 6 = TSCA 5a2 11 = CA P65 REPRO 16 = MN RTK
2 = ACGIH A1         7 = TSCA 5e 12 = CA RTK 17 = NJ RTK
3 = ACGIH A2         8 = TSCA 6 13 = IL RTK 18 = PA RTK
4 = OSHA Z 9 = TSCA 12b 14 = LA RTK 19 = RI RTK
5 = TSCA 4 10 = CA P6 CARC 15 = MI 293

Code Key: CARC=Carcinogen; REPRO=Reproductive

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| SECTION 16                                                        OTHER INFORMATION |

N/D = Not determined, N/A = Not applicable

**KET TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):**

H304: May be fatal if swallowed and enters airways; Aspiration, Cat 1

H401: Toxic to aquatic life; Acute Env Tox, Cat 2

H411: Toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 2

**THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:**
Updates made in accordance with implementations of GHS requirements.

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