**Safety Data Sheet: Signal Draw 548**

**Revision Date: January 2nd 2022**

|  |
| --- |
| SECTION 1                                              PRODUCT AND COMPANY IDENTIFICATION |

**PRODUCT**

**Product Name:** Signal Draw 548

**Product Description:** Base oil and Additives

**Intended Use:** Metal forming 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

Visit us at: www.beaconlubricants.com

|  |
| --- |
| SECTION 2                                                HAZARDS IDENTIFICATION |

This material is not hazardous according to regulatory guidelines (M)SDS Section 15)

**Other hazard information:**

**HAZARD NOT OTHERWISE CLASSIFIED (HNOC):**None as defined under 29 CFR 1900. 1200.  
  
**PHYSICAL / CHEMICAL HAZARDS**  
No significant hazards  
**HEALTH HAZARDS**  
High-pressure injection under skin may cause serious damage. This product may be used in certain applications where misting can occur. Excessive exposure to liquids and mists may cause skin and eye irritation. In addition, excessive exposure to mists may cause respiratory irritation and damage and aggravate pre-existing emphysema or asthma. Mists may be irritating to the eyes, nose, throat and lungs. Excessive exposure may result in eye, skin or respiratory irritation.   
  
**ENVIRONMENTAL HAZARDS**  
No significant hazards.   
  
**NFPA Hazard ID:** Health:     0 Flammability:     1 Reactivity:     0  
**HMIS Hazard  ID:** Health:   0 Flammability:     1 Reactivity:     0  
  
**Note:**  This material should not be used for any other purpose than the indented 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 |

This material is defined as a mixture.

**Hazardous Substance(s) or Complex Substance(s) required for disclosure**

|  |  |  |
| --- | --- | --- |
| **NAME** | **CAS#** | **Concentration\*** |
| PETROLEUM DIST., HYDROTREATED HEAVY PARAFFINC | 54742-54-7 | 70-80% |
| FATS AND GLYCERIDIC OILS | 58991-19-5 | 20-30% |
| MINERAL OIL | 64742-65-0 | 5-10% |

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

As per paragraph (i) of 29 CFR 1910.1200, formulation is a 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 of paragraph (i).

|  |
| --- |
| SECTION 4                                                FIRST AID MEASURES |

**First Aid: Eyes**

Remove contact lenses immediately. Flush thoroughly with water. If irritation occurs, call a physician.

**First Aid: Skin**

For skin contact, wash immediately with soap and water.

**First Aid: Ingestion**

Not expected to be a problem. However, if greater than ½ liter (pint) is ingested, immediately give 1 to 2 glasses of water and call a physician, hospital emergency room or poison control center for assistance. Do not induce vomiting. Never give anything by mouth to a victim who is unconscious or having convulsions.

**First Aid: Inhalation**

If symptoms of hydrogen sulfide exposure are displayed, remove individual to fresh air and administer oxygen, if properly trained. Seek medical attention.

**Expected Acute and Delayed Symptoms**

No additional information available.

**Important Symptoms and Effects**

No additional information available.

**Protection of First-Aiders**

No additional information available.

**First Aid: Notes to Physician**

No additional information available

|  |
| --- |
| SECTION 5                                                     FIRE FIGHTING MEASURES |

**General Fire Hazards**

See Section 9 for Flammability Properties. Not a fire hazard

**Hazardous Combustion Products**

Flammable/poisonous gases may be released upon combustion.

**Extinguishing Media**

Dry chemical, foam, carbon dioxide. Water fogs should be used to cool containers exposed to extreme heat.

**Unsuitable Extinguishing Media**

None identified

**Fire Fighting Equipment/Instructions**

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Remove all individuals from area who are not properly trained in firefighting.

**NFPA Ratings: Health:** 1 **Fire:** 1 **Reactivity:** 0

Hazard Scale: 0= Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

|  |
| --- |
| SECTION 6                                                           ACCIDENTAL RELEASE MEASURES |

**Recovery and Neutralization**

Dike the spilled material, where this is possible. Stop the flow of material, if this is without risk.

**Materials and Methods for Clean-Up**

Absorb spill with inert material. Shovel material into appropriate container for disposal.

**Emergency Measures**

In case of large spills, follow all facility emergency response procedures.

**Personal Precautions and Protective Equipment**

Remove all individuals from area who have not been properly trained in emergency medical response.

**Environmental Precautions**

This product may be classified as oil under section III of the Clean Water Act. Spills entering surface waters or any water courses or sewers entering surface waters that cause a sheen, must be reported to the Coast Guard toll free number (800)424-8802. In case of accident or road spill, notify Chemtrec, (800)424-9300.

**Prevention of Secondary Hazards**

No additional information available.

|  |
| --- |
| SECTION 7                                                HANDLING AND STORAGE |

**Handling Procedures**

Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Use non-sparking tools.

**Shipping and Storing Procedures**

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat. Protect from light. Keep in properly labeled containers. Keep out of reach of children.

**Incompatibilities:**

Oxidizing Agents

|  |
| --- |
| SECTION 8                                        EXPOSURE CONTROLS / PERSONAL PROTECTION |

**Component Exposure Limits**

**Oil Mist (Mineral)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ACGIH TLV | TWA: | N/A ppm | TWA: | 5mg/m3 | STEL: | N/A ppm | STEL: | 10 mg/m3 |
| OSHA PEL: | TWA: | N/A ppm | TWA: | 5mg/m3 | STEL: | N/A ppm | STEL: | N/A mg/m3 |
| NIOSH REL: | TWA | N/A ppm | TWA: | 5mg/m3 | STEL: | N/A ppm | STEL: | 10 mg/m3 |

N/A signifies not available

\*Product has 0 kPa pressure at 68°F and is not expected to present any inhalation hazard at ambient conditions. Caution should be taken to prevent aerosolization or misting of this product. Oil mist, if generated, is considered hazardous according to the OSHA Hazard Communication Standard.

**Engineering Controls:** Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airbone contaminants below any recommended or statutory limits.

**Eye/Fact Protection:** Safety Glasses

**Skin Protection**: Normal work gloves are appropriate

**Respiratory Protection:** Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicated this is necessary. Respirator selection must be based on known or anticipated exposure levels.

**General Hygiene:** Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contained clothing.

|  |
| --- |
| 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:** Amber  
**Odor:** Lube Oil   
**Odor Threshold:** N/D  
  
**IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION**  
**Relative Density (at 15°C):** 0.90  
**Flammability (Solid, Gas):** N/A  
**Flash Point [Method]:** >230°C (446°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:** 108 cSt at 40°C | 9.45 cSt at 100°C  
**Oxidizing Properties:** See Hazards Identification Section.   
  
**OTHER INFORMATION**  
**Freezing Point:** N/D  
**Melting Point:** N/A  
**Pour Point:**

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

|  |
| --- |
| 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 |

**INFORMATION ON TOXICOLOGICAL EFFECTS**

|  |  |
| --- | --- |
| **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 phsico-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**

|  |  |
| --- | --- |
| **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

|  |
| --- |
| 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**

Base oil component—Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and waste water 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:** 0 G/L [ASTM E1868-10]

|  |
| --- |
| 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, corrositivity 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.

|  |
| --- |
| 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 |

**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:**

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

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

**SARA (311/312) REPORTABLE HAZARD CATEGORIES:** None  
  
**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

|  |
| --- |
| SECTION 16                                                        OTHER INFORMATION |

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

**THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:**  
Updates made in accordance with implementations of GHS requirements.   
  
The information and recommendations contained herein are, to the best of Beacon Lubricants knowledge and belief, accurate and reliable as of the date issued. You can contact Beacon Lubricants to insure that this document is the most current available from Beacon Lubricants. 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 intended use. If the 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. Alternation of this document is strictly prohibited. Expect to the extent required by law, re-publication or retransmission of this document, in whole or in part, is not permitted.