**Safety Data Sheet: Signal DEF**

**Revision Date: January 2nd 2022**

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| SECTION 1 PRODUCT AND COMPANY IDENTIFICATION |

**PRODUCT**

**Product Name:** Signal DEF

**Intended Use:** Diesel Exhaust 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 |

**Hazardous Material Information Rating System:**

(0 = least; 1 = slight, 2 = moderate; 3 = high; 4 = extreme)

**Health(blue) 1**

**Flammability(red)0**

**Reactivity(yellow)0**

**Emergency Overview:**

Caution- Eye and Skin irritant

**Symptoms of Over Exposure:**

Routes of exposure: Eye, skin contact, inhalation, ingestion

Eyes: May cause irritation

Skin: May cause irritation

Inhalation: May cause irritation, may cause respiratory tract irritation

Ingestion: may cause stomach distress, nausea or vomiting

Target Organs: Eyes, skin and respiratory system.

Signs and symptoms: May include redness, ederna, drying, cracking of the skin,

Symptoms of exposure may be headache, dizziness, tiredness, nausea and vomiting.

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| SECTION 3                                COMPOSITION / INFORMATION ON INGREDIENTS |

This material is defined as a mixture.   
  
**Hazardous Substance(s) or Complex Substance(s) required for disclosure**

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| **Name** | **CAS #** | **% by weight** |
| Urea | 57-13-6 | 32.5 |
| Water | 7732-18-5 | 67.5 |
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\*All Concentrations are percent by weight unless material is a gas. Gas concentrations 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).

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| SECTION 4                                                FIRST AID MEASURES |

**If Inhaled:** Remove to fresh air. If breathing becomes difficult, contact a medical physician. Give artificial respiration if victim is not breathing and obtain immediate medical attention.

**If Ingested:** Call physician or Poison Control Center immediately for most current information. Dilute with large amounts of water. Do not induce vomiting unless directed to do so by a medical professional. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. If vomiting occurs, keep head lower than hips to prevent introduction of fluids into lungs.

**In case of skin contact:** Was thoroughly with soap and water. Remove contaminated clothing and wash before reuse. Seek medical attention if skin becomes irritated.

**In case of eye contact:** Flush immediately with water for at lest 15 minutes, lifting the upper and lower eyelids occasionally. Call a physician if eye irritation persists. Victims of chemical exposure and all rescuers must be taking for medical attention. Take a copy of label and SDS to physician or health professional with victim.

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| SECTION 5                                                     FIRE FIGHTING MEASURES |

**Flash Point:** Not flammable

**Test Method:** Not flammable

**LEL Flammable Limits:** Not flammable

**UEL Flammable Limits:** Not Flammable

**Auto Ignition Temperature**: Not flammable

**Extinguishing Media:** Water spray, foam, carbon dioxide, dry-chemical

**Unusual Fire and explosion hazards:** Avoid high temperatures that may cause thermal decomposition..

**Special Firefighting Procedures:** Wear positive pressure, self-contained breathing apparatus (SCBA) and googles.

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| SECTION 6                                                           ACCIDENTAL RELEASE MEASURES |

**Spill and leak response:** For small or incidental spills, the minimum personal protective equipment should be rubber gloves, rubber apron, and chemical goggles. Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. Gas masks with ammonia canister or SCBA gear may be required. For large spills, contain by diking with soil, sand, or other absorbent material such as vermiculite or diatomaceous earth. Keep material out of sewers, storm drains, and surface water. Comply with all applicable government regulations on spill reporting, handling, and waste disposal.

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| SECTION 7                                                HANDLING AND STORAGE |

**Storage Practices: Store in areas away from children, feed and food products, and sources of heat. Immediately clean up spills that occur during handling or storage**

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| SECTION 8                                    EXPOSURE CONTROLS / PERSONAL PROTECTION |

**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:  
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 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 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. 

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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:** Light  
**Odor:** Characteristic   
**Odor Threshold:** N/D  
  
**IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION**  
**Relative Density (at 15°C):** 0.863  
**Flammability (Solid, Gas):** N/A  
**Flash Point [Method]:** >200°C (400°F) [ASTM D-02]   
**Flammable Limits (Approximate volume % in air):** LEL: 0.9 UEL: 7.0  
**Auto ignition Temperature:** N/D  
**Boiling Point / Range:** >316°C (600°F)  
**Decomposition Temperature**: N/D  
**Vapor Density (Air = 1):**   >2 at 101 kPa  
**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):** >3.5  
**Solubility in Water:**   Negligible   
**Viscosity:** 32 cSt (32 mm2/sec) at 40°   
**Oxidizing Properties:** See Hazards Identification Section.

**OTHER INFORMATION**  
**Freezing Point:** N/D  
**Melting Point:** N/A  
**Pour Point:** 26°C (21°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 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. |

**OTHER INFORMATION**  
**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 — 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 wastewater solids.  
  
**PERSISTENCE AND DEGRADABILITY  
Biodegradation:**  
Base oil component— Expected to be inherently biodegradable  
  
**BIOACCUMULATION POTENTIAL**  
Base oil component — Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bio-concentration or limit bioavailability.   
  
**OTHER ECOLOGICAL INFORMATION  
VOC:** 1.1 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. 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, 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.

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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 no considered hazardous in accordance with OHSA HazCom 2012, 29, CFR 1910. 1200.  
  
Listed or exempt form listing/notification on the following chemical inventories: AICS, DSL, ENCS, IECSC, KECI, PICCS, TSCA  
  
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 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

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| SECTION 16                                                        OTHER INFORMATION |

N/D = Not determined, N/A = Not applicable   
  
KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):  
H305: May be harmful if swallowed and enters airways, Cat 2  
  
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.