Safety Data Sheet: Signal Cut 401S
Revision Date: January 2nd 2024

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: Signal Cut 401S
Product Description: Base oil and Additives
Intended Use: Metal processing 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

SECTION 2 HAZARDS IDENTIFICATION

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

CLASSIFICATION:

LABEL:
Pictogram: None

Signal Word: None

Hazard Statements:
The mixture does not meet the criteria for classification.

Precautionary Statements:
Prevention: Observe good industrial hygiene practices.
Response: If exposed or concerned: Get medical advice/attention

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: 1 Flammability: 1 Reactivity: 0
HMIS Hazard ID: Health: 1 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.

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

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 our under our 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.

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 supply to cool fire exposed surfaces and to protect personnel.

Unusual Fire Hazards: Pressurized mists may form a flammable mixture.

Hazardous Combustion Products: Oxides of carbon, Smoke, Fume, Sulfur oxides, Aldehydes, Incomplete combustion products

FLAMMABILITY PROPERTIES
Flash Point [Method]: >170°C (338°F) [ASTEM D-92]
Flammable Limits (Approximate volume % in air): LEL: 0.9 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. See Section 5 for firefighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Service. 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 judgement 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 as 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

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.

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
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 are 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.

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: Clear
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

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 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

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 — 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]

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.

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: 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

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.

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 ensure 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 ensure 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.