**Safety Data Sheet: Signal Kleen Windshield Washer Fluid**

**Revision Date: January 2nd 2022**

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| SECTION 1                                              PRODUCT AND COMPANY IDENTIFICATION |

**PRODUCT**

 **Product Name:** Signal Kleen Windshield Washer Fluid

 **Intended Use:** Windshield Washer 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  |

**Appearance:** Clear, colorless liquid

**Odor:** Mild alcohol odor

**Classification:** Flammable liquid, Category 3

 Acute Toxicity, Category 1\*

 Reproductive Toxicity, Category 1B

 Target Organ Toxicity, Repeat Cat. 2

 Aspiration Hazard, Category 1\*\*

**Target Organs:** Central Nervous System, Eyes

**Label Elements:**

**Hazard Symbol:**



**Signal word:** Danger

**Hazard Statement:** Flammable liquid and vapor. Causes serious eye irritation. Causes damage to organs through prolonged or repeated exposure.

**Precautionary Statement:**

**Prevention:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion- proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Do not breathe dust or mists. Do not eat, drink or smoke when using this product. Avoid release to the environment.

**Response:** If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical advice/attention if you feel unwell. In case of fire: Use CO2, dry chemical or foam for extinction. Water can be used to cool and protect exposed material. Collect spillage.

**Storage:** Store in well-ventilated place. Keep cool.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Other hazards which do not result in GHS classification: None identified.

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| SECTION 3                                      COMPOSITION / INFORMATION ON INGREDIENTS |

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| Name | CAS # | Concentration\* |
| Methanol | 67-56-1 | 25 - 50 |

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| SECTION 4                                                FIRST AID MEASURES |

 **General information:** Get medical advice/attention if you feel unwell.

Inhalation: Remove exposed person to fresh air immediately. Restore or assist breathing, if necessary. Get medical attention immediately – symptoms of exposure may include giddiness, intoxication, CNS depression, or coma.

**Ingestion:** Swallowing methanol is potentially lethal. Symptoms of methanol poising may be delated up to 24 hours. Do NOT induce vomiting. If ingested, do not wait for symptoms to develop – Seek medical attention IMMEDIATELY.

**Skin Contact:** Take off immediately all contaminated clothing. Take off contaminated clothing and wash before re-use. Wash with soap and water. If skin irritation occurs, get medical attention.

**Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Most important symptoms/effects, acute and delayed**

**Symptoms:** See section 11. Indication of immediate medical attention and special treatment needed

**Treatment:** Treat symptomatically.

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| SECTION 5                                                     FIRE FIGHTING MEASURES  |

**NFPA (estimated):** Health – 1 Fire – 3 Instability – 0

**Flash Point:** 35°C / 95°F

 **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:** General purpose synthetic foams or protein foams may work, but much less effectively. Water may be effective for cooling but may not be effective for extinguishing a fire because it may not cool methanol below its flash point.

**Firefighting Procedures:** Methanol burns with a clean, clear flame that is almost invisible in daylight. Stay upwind! Isolate and restrict area access. Concentrations of greater than 25% methanol in water can be ignited. Use fine water spray or go to control fire spread and cool adjacent structures of containers. Contain fire control water for later disposal. Fire fighters must wear full face, positive pressure, self-contained breathing apparatus or airline and appropriate protective firefighting clothing as per NFPA. Not that methanol fires may require proximity suits. Take care not to walk through any spilled chemical.

**Unusual Hazards:** Burns with a clean flame that is difficult to see in certain conditions. Vapors may travel long distances along the ground and may be ignited from distant sources. See section 10 for additional 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. Residual liquid can be absorbed on inert material. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas.

**Environmental Precautions:** Avoid release to the environment. Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

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| SECTION 7                                                HANDLING AND STORAGE  |

 **Precautions for safe handling:** Use only in a well-ventilated area. Avoid breathing vapors. Keep containers closed when not in use. Use appropriate containment to avoid environmental contamination. Vapors are heavier than air and will tend to accumulate in low areas. Avoid use in confined areas without adequate ventilation. Areas of inadequate ventilation could contain concentrations high enough to cause eye irritation, headaches, intoxication, nervous system depression or methanol poisoning. Avoid breathing dust, fume, gas, mist, vapors, or spray. Wash thoroughly after handling. Launder contaminated clothing before reuse. Empty container contains product residue which may exhibit hazards of the product. Do no weld, heat or pressurize empty containers. Do not re-use containers. Dispose of packaging or containers in accordance with local, regional, national, and international regulations. Store away from strong oxidizers.

**Maximum Storage Temperature:** Do not store or handle at elevated temperatures.

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| SECTION 8                                      EXPOSURE CONTROLS / PERSONAL PROTECTION |

**EXPOSURE LIMIT VALUES**

**US**

**Guidelines by component**

Methanol (CAS # 67-56-1)

OSHA TWA: 200 ppm, or 260mg/m3

OSHA STEL: 250 ppm or 325 mg/m3

ACGIH TWA: 200 pp

ACGIH STEL: 250 ppm

**Other exposure limits:** Not determined

**ENGINEERING CONTROLS**: Use in a well-ventilated area. Local and general ventilation should keep methanol vapor concentration below permissible limits. Where exposure potential exceeds recommended limits, use a NIOSH/OSHA approved supplied air respirator as recommended. Vapors are heavier than air and will tend to accumulate in low-lying areas.

**PERSONAL PROTECTION**
<2000 ppm: Supplied air respirator

<5000 ppm: Supplied air respirator operated in continuous-flow mode

<6000 ppm: Supplied air respirator with a tight-fitting face piece operated in a continuous- flow mode; or Full-face piece self-contained breathing apparatus or full-face piece supplied air respirator.

**Hand Protection:**Use butyl rubber or nitrile rubber gloves

**Eye Protection:**Face shield or chemical splash goggles when splashing may occur. If possible, remove contact lenses before handling.

**Skin and Body Protection:** Use chemical resistant pants and jackets, preferably of butyl or nitrile rubber.

**Other:** Locate the nearest eyewash station and safety shower before handling this product. Limit exposure whenever possible. Consider flammability and always use non-sparking tools.

**Specific Hygiene Measures:** Wash thoroughly after handling this product.

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| SECTION 9                                                PHYSICAL AND CHEMICAL PROPERTIES |

 **Appearance**

**Physical state:** clear, colorless liquid

**Form:** liquid

**Color:** clear

**Odor:** N/A

**Odor threshold:** No data available.

**pH:** No data available.

**Freezing point:** No data available.

**Boiling Point:** > 82°F (180°C)

**Flash Point:** 35 °F (95 °C)

**Evaporation rate:** No data available.

**Flammability (solid, gas):** No data available.

**Upper/lower limit on flammability or explosive limits**

**Flammability limit - upper (%):** No data available.

**Flammability limit - lower (%):** No data available.

**Explosive limit - upper (%):** No data available.

**Explosive limit - lower (%):** No data available.

**Vapor pressure:** No data available.

**Vapor density:** >1 (where air = 1)

**Relative density:** 0.957 mg/cu. Cm @ 15.6°C

**Solubility(ies)**

**Solubility in water:** Miscible in water, alcohol; insoluble in organic solvent

**Solubility (other):** No data available.

**Partition coefficient (n-octanol/water):** No data available.

**Auto-ignition temperature:** No data available.

**Decomposition temperature:** No data available.

**Viscosity:** Not determined

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| SECTION 10                                                STABILITY AND REACTIVITY  |

**Chemical Stability:** Material is normally stable at ambient temperatures and pressures. Has low vapor pressure- vapors may form explosive mixtures with air!

**Decomposition Temp:** Not Determined

**Incompatibility:** Oxidizers and strong acids or bases. Contact with these materials may cause violent or explosive reactions. May react with metallic aluminum or magnesium to generate explosive hydrogen gas.

**Polymerization:** Will not occur

**Thermal Decomposition:** Primarily oxidizes to carbon dioxide in normal combustion conditions. In lower oxygen environments carbon monoxide, formaldehyde, or formic acid may be formed.

**Conditions to Avoid:** Flammable liquid and vapor – keep away from strong oxidizers, acids, bases as well as heat/sparks/open flames/hot surfaces.

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| SECTION 11                                                   TOXICOLOGICAL INFORMATION |

**Acute Exposure**

**Eye Irritation:** expected to cause mild to moderate irritation of the eye if exposed to liquid or in high vapor concentrations. May cause irritation, tearing, or burning of the eyes.

**Skin Irritation:** Expected to be mildly irritation to the skin. Symptoms of irritation may include redness, drying, and cracking of the skin.

**Respiratory Irritation:** Methanol may cause irritation of mucous membranes, especially if concentrations exceed 1000 ppm.

**Dermal Toxicity:** Methanol can be absorbed through the skin and presents a toxicity hazard similar to that of inhalation or ingestion.

**Inhalation Toxicity:** Inhalation of this product may be harmful or fatal. Symptoms may include headaches, sleepiness, nausea, confusion, loss of consciousness, digestive and visual disturbances and even death. If exposure exceeds recommended levels, or if you feel unwell – seek medical help for methanol poisoning. If left untreated, may cause permanent blindness, nervous system effects, or death.

**Oral Toxicity:** Toxic or fatal if ingested. Symptoms of methanol poisoning include headaches, sleepiness, nausea, confusion, intoxication, loss of consciousness, digestive and visual disturbances, coma or death. Seek medical attention immediately for methanol positioning. If ingested, DO NOT wait for symptoms to develop before getting treatment.

**Aspiration Hazard:** This product has a very low viscosity and may be fatal if aspirated into the airways. Do NOT induce vomiting, as this increases risk of aspiration.

Chronic Exposure:

Chronic Toxicity: This product may cause dryness or defatting of the skin, dermatitis, or may aggravate existing skin conditions.

Carcinogenicity: This product and its components are NOT listed by the IARC, NTP, ACGIH, or OSHA as carcinogens.

Mutagenicity: Available information does not suggest that this product is a germ cell mutagen.

Reproductive Toxicity: Available information does not suggest that this product is a reproductive toxic.

Teratogenicity: Methanol had produced fetotoxicity in rats and teratogenicity in mice exposed by inhalation to high concentrations of methanol vapors.

**Additional Information:**

Target organ toxicity: Product is toxic to organs: Central nervous system, eyes. Methanol poisoning procedures metabolic acidosis (formic acid) that may damage the liver, kidneys, or other organs.

Synergistic effects: In animals, high concentrations of methanol has increased the toxicity of other chemicals, particularly liver toxins such as carbon tetrachloride. Ethanol significantly reduces the toxicity of methanol due to competition with alcohol dehydrogenase and is sometimes used to treat methanol poisoning.

Pharmacokinetic: Methanol is oxidized to carbon dioxide and water in a multi-step process. Metabolic intermediates are responsible for the toxicity of methanol. The half-like of methanol is 1.5-3 hours for low doses (less than 100mg/kg).

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| SECTION 12                                                ECOLOGICAL INFORMATION  |

Environmental Toxicity-

Freshwater Fish: Acute LD50 = 63 g/l (96h)

Freshwater Invertebrates: Acute LD50= 120 g/l (48h); 33 g/l (24h)

Algae: N/D

Saltwater Fish: N/D

Saltwater Invertebrates: N/D

Bacteria: See Miscellaneous

Miscellaneous: Study of methanol on sewage sludge bacteria reported a retardation of bacterial digestion at concentrations of 0.5%.

Environmental Fate-

Biodegrading: This product easily biodegrades in water and soil. Products of biodegradation are carbon dioxide and water.

Bioaccumulation: Product is very mobile in soil and water and is volatile – it is not expected to bio accumulate.

Soil Mobility: Product has high mobility in soil and evaporates easily at environmentally relevant temperatures.

Other Effects: N/D

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| SECTION 13                                                 DISPOSAL CONSIDERATIONS |

**Disposal instructions:** Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Dispose of packaging or containers in accordance with local, regional, national and international regulations. Empty containers retain material residue. Do not cut, weld, braze, solder, drill, grind or expose containers to heat, flame, spark or other sources of ignition.

**Contaminated Packaging:** Container packaging may exhibit hazards

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| SECTION 14                                                TRANSPORT INFORMATION  |

Description shown may not apply to all shipping situations. Consult applicable shipping codes to determine any additional shipping requirements.

US DOT

UN NO: 1989

UN Proper Name: Alcohols, flammable, toxic, n.o.s. (methanol solution)

UN Class: 3

Packing Group: III

Marine Pollutant: No

IMDG: UN 1986, Alcohols, flammable, toxic, n.o.s. (methanol solution), Class 3(6.1), PG III Stowage Cat. “A” (on deck or under deck)

ICAO/IATA: UN 1986, Alcohols, flammable, toxic, n.o.s. (methanol solution), Class 3(6.1), PG III Passenger Aircraft- less than 60L Cargo Aircraft – less than 220 L

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| SECTION 15                                                    REGULATORY INFORMATION |

**Global Chemical Inventories/Regulations**

**USA:** All components of this material are on the US TSCA

**Other TSCA Reg:** None known

**EU:** Components of this product and similar mixtures are registered under REACH. Consult the European Chemicals Agency regarding REACH registration, reporting and other legal requirements for methanol solutions before importing to the EU.

**New Zealand:** May require notification before sale under New Zealand Regulations

**Canada:** All components of this product are listed on the Canadian Domestic Substances List (DSL).

**Canada WHMIS:** B2, D1B, D2A, D2B

**SARA Ext. Haz. Subst.** No chemicals in this product are listed on the SARA 302, extremely hazardous substances list.

**SARA Sect. 313:** This product contains methanol (CAS # 67-56-1), found in SARA 313. See 40 CFR 372.

**SARA 311/312 Class**: Acute Hazard- Yes

 Chronic Hazard- Yes

 Fire Hazard- YES

 Reactivity Hazard- NO

**CERCLA Haz, Sub.** Methanol (CAS #67-56-1) is listed. See 40 CFR 302

**State Regulations**

**CA Prop 65:** This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Right to know component: Right to know states:

Methanol (CAS #67-56-1) NJ, PA, MA

Other

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| 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.

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