

# WARREN OIL COMPANY, INC.

## MATERIAL SAFETY DATA SHEET

Warren Oil Company, Inc.  
Hwy 301 North  
PO Box 1507  
Dunn, NC 28335  
910-892-6456

*Product:* Warren Starting Fluid

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### **Section 1: Product Identification**

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*Chemical Name:* Engine Starting Fluid  
*Synonym(s)/Common Name(s):* Starting Fluid

*Chem Formula:* NA Mixture  
*CAS Number:* NA Mixture

*DOT Ship Name:* Engine Starting Fluid  
*DOT Haz Class:* 2.1  
*DOT ID Number:* UN1960

*Chemtrec:* 1-800-CMA-8200

*Hazard Ratings:* Health 1 Flammability 4 Reactivity 1

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### **Section 2: Hazardous Ingredients**

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<b>Ingredient</b>	<b>OSHA PEL/ACGIH TLV</b>	<b>CAS Number</b>	<b>Percent</b>
Ethyl Ether	400/500	60-29-7	25%
Butane/Propane (A60)	NA/1000 PPM	106-97-8/74-98-6	20-35%
Carbon Dioxide	NA/5000 PPM	124-38-9	<05%
Heptane	400/400	142-82-5	20-35%
Highly Refined Lubricating Oil	NA	64742-65-0	<01%

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### **Section 3: Physical Characteristics**

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### **Section 4: Fire and Explosion**

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*Autoignition Temperature:* 761 deg. F (405 deg. C)

*Decomposition Products Under Fire Conditions:* CO, CO2

*“Empty” Container Warning:* Follow accepted industry practices and/or comply with applicable Federal, State and Local regulations. Check before handling.

*Extinguishing Media and Fire Fighting Procedures:* When fighting fire or involved with this product, use self contained breathing apparatus. Protective clothing should minimize exposed skin and include goggles, full

faced shield if possible and lined rubber gloves.

*Flash Point (min.):* (Gas) -76 deg. F.

*Flammable or Explosive Limits (Aprx.. % by volume in air)*

*Lower:* 1.9

*Upper:* 9.5

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**Section 5: Reactivity Data**

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*Reactivity:* Keep away from heat, sparks and flames. Products tend to form explosive peroxides under the influence of air and light and on long standing.

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**Section 6: Health Hazard Data**

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*Eye Contact:* Vapor contact - Flush with fresh water for at least 20 minutes. Liquid contact - Flush exposed area with lukewarm water or otherwise warm skin slowly. Frostbite is probable. Call a physician.

*Ingestion:* Liquid - not probably. If ingested, however, keep patient calm, if conscious, and get to a physician immediately - Frostbite is probable, indicated by necrosis by lip and tongue (contacted tissue), blanching of skin, pain and tenderness. Warm skin slowly.

*Inhalation:* Vapor contact - Primary route of exposure. If inhaled, remove to fresh air. Keep warm and at rest. If breathing is difficult give oxygen. If not breathing, give artificial respiration and check for pulse. If no pulse, start CPR. Do not give stimulants (adrenaline, epinephrine or hand held aerosols). Keep patient at rest for 24 hours after overexposure. Note: Human poisoning potential: Sniffing hydrocarbons propellants for their intoxicating effects is extremely dangerous and death may occur without warning. Hydrocarbons exhibit very toxic properties (asphyxiation, cardiac arrhythmia's) when sniffed; however because of variations in response, it is difficult to predict the butane/propane (A60) may cause drowsiness or asphyxiation.

*Skin Contact:* Vapor contact - Flush with fresh water for at least 20 minutes. Liquid contact - Flush exposed area with lukewarm water or otherwise warm skin slowly. Frostbite is probable. Call a physician.

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**Section 7: Precautions for Safe Handling and Use**

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*Precautions for Handling:* All ignition sources should be eliminated. Smoking should be prohibited in storage areas. Electrical installations should be in accordance with article 501 of the National Electrical Code. NFPA 30 Flammable and Combustible Code, should be followed for all storage and handling. Frequent careful leakage inspections should be done. Automatic sprinkler systems should be provided. Isolate from oxidizer chemicals capable of spontaneous heating, materials reacting with air or moisture to liberate heat, ignition sources and explosives. Consult local fire codes for additional storage information.

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**Section 8: Industrial Hygiene Control Measures**

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*Industrial Hygiene Control Measures:* See Section 6 Health Hazard Data

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**Section 9: Special Precautions**

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*Eye Protection:* Avoid contact with eyes. Safety goggles required.

*Personal Hygiene:* Exposed employees should exercise reasonable personal cleanliness; This includes cleansing exposed skin areas several times daily. Launder clothes at least twice weekly.

*Spill or Leak Procedures:* Follow accepted industry practices and/or comply with applicable Federal, State and Local government regulations.

*Ventilation:* Store and use with adequate ventilation. Never use in a closed and confined space. Local exhaust may be necessary.

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***Disclaimer***

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