MATERIAL SAFETY DATA SHEET

PART I What is the material and what do I need to know in an emergency?

1. Product Identification

Chemical Name: Prediluted Windshield Washer Fluid

Trade Name: WeatherTech® Washer Fluid

CAS Registry: Mixture

Manufacturers Name: CLEANPARTS, Inc.

6021 East 50th Avenue Commerce City, CO 80022

Emergency Phone: 1-800-424-9300 (CHEMTREC)

Business Phone: 303-388-8200

Date of Preparation: August 21,2004 Last Revision: August 21,2004

2. Composition and Information on Ingredients

| Chemical Name | CAS# | % of compound | Exposure Limits ACGIH OSHA | | | | |
|--|-----------|---------------|-------------------------------|-----------------------------|-----------------|--------------------|---------------------|
| Methanol | 67-56-1 | 30 to 50% | TLV ppm 200 | STEL ppm 250 | PEL Sppm 200 | STEL ppm 250 | IDLH ppm 6000 |
| Alkyl phenol Etyhoxylste | 9016-45-9 | <1-3% | N/L | N/L | N/L | N/L | N/L |
| 2-butoxyethanol: ethylene glycol monobutyl ether | 111-76-2 | <1-3% | 20 | N/L | 50 skin | N/L | N/L |
| 1,2-ethanediol | 107-21-1 | | N/L | 100 MG/M3 ceiling, aeros | N/L sol | N/L | N/L |
| 1-butanol | 71-36-3 | | 20 | N/L | 100 | N/L | N/L |
| water | 7732-18-5 | balance | N/A | | | | |

3. Hazard Identification

Emergency Overview: This is a clear purple colored liquid with as pungent odor. It is combustible and toxic. Methanol cannot be rendered non-toxic. Responders must protect against possible inhalation and contact exposure. Fire protection must be available to prevent or rapidly extinguish a fire.

Primary Routes of Entry: Inhalation, skin contact, eyes, ingestion

Target Organs: Central Nervous System, eyes, circulatory and respiratory systems.

<u>Symptoms of Over Exposure by Route of Exposure:</u> Windshield Washer Solvent may be harmful if swallowed, inhaled or injected into skin. Windshield Washer Solvent can cause skin and eye irritation or damage. It can also be irritating to mucous membranes and the respiratory tract.

<u>Inhalation:</u> Inhalation may lead to irritation of the nose and throat. Symptoms of overexposure may include dizziness, coughing headache, dyspnea, llachrymation, nausea and vomiting. Exposure to high concentrations of vapor may cause unconscious or death. Aspiration into the lungs can cause chemical pneumonitis.

<u>Contact With Eyes:</u> Windshield Washer Solvent is an eye irritant. Splashes in the eye may cause irritation, redness, tearing and temporary corneal damage or blindness.

<u>Skin Absorption:</u> Windshield Washer Solvent is absorbed through the skin and may result in effects similar to inhalation exposure.

<u>Ingestion:</u> Ingestion of 1 to 4 ounces of Windshield Washer Solvent can cause irreversible damage to the nervous system, blindness or death. It cannot be made non-poisonous.

Injection: Injection can cause redness and irritation of the surrounding tissue.

Health Effects or Risks From Exposure (In Lay Terms)

<u>Acute:</u> Severe irritation of the tissue that had contact with the product (skin, eyes, mucous membranes). Drowsiness, fatigue, confusion may be experienced after inhalation or ingestion of the material.

<u>Chronic:</u> Washer Fluid is eliminated slowly from the body. Repeated exposure may build up toxic levels in body tissues. Animal studies show long term exposure to Methanol damages the CNS, kidneys or liver, skin disorders and birth defects.

Hazard Material Information System

| Health (Blue) | 1 |
|---------------------|---|
| Flammability (Red) | 3 |
| Reactivity (Yellow) | 0 |

Protective Equipment: B

Eyes: Eye Protection Respiratory: See section 8

Hands: Nitrile or Butyl Gloves Body: Protective Apron

Part II What should I do if a hazardous Situation Occurs?

4. First Aid Measures

Skin Exposure: If spilled on skin, **IMMEDIATELY** begin decontamination with running water for at least 15 minutes. Remove exposed or contaminated clothing, taking care to not contaminate the eyes. Victim and rescuers must seek immediate medical attention.

Eye Exposure: If chemical is splashed in the eyes, open victim's eyes while under gentle running water. Use sufficient force to open eyelids. Have victim "roll" eyes. Do this for a minimum of 15 minutes.

<u>Inhalation:</u> If chemical is inhaled, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. If necessary, get emergency medical help (call 911). Remove or cover gross contamination to avoid contamination of rescuers.

<u>Ingestion:</u> If chemical is swallowed, call Physician or Poison Control Center for most recent information. Windshield Washer Solvent ingestion is life threatening – drink 2 glasses of water and induce vomiting. Follow vomiting with drinking 2 teaspoons of baking soda in water. NEVER induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions or cannot swallow.

Victims of chemical exposure MUST be taken for medical attention. Rescuers should be taken for medical attention if necessary. Take a copy of the label and MSDS with the victim to a health professional.

5. Fire Fighting Measures

Flash Point, 50/50 mixture, °F (closed cup): 102°F

Auto-ignition temperature, °F: >878°F

Flammable Limits (in air by volume %): Lower: 6%

Upper: 36.5%

<u>Fire Extinguishing Materials:</u> Windshield Washer Fluid is a combustible Class II liquid which is a dangerous fire hazard when exposed to heat, flames and oxidizing materials.

Water spray: OK Carbon Dioxide: OK Halon: OK Foam: OK Dry Chemical: OK Other:

NFPA Ranking

Health 1
Flammability 3
Reactivity 0
Other NA

<u>Special Fire Fighting Procedures:</u> Incipient Fire Responders should wear eye protection. Structural Fire Fighters must wear self-contained breathing apparatus and full protective equipment.

<u>Unusual Fire and Explosion Hazards</u>: Water Mixtures containing >20% methanol are combustible. Windshield Washer Solvent fires may not be visible. When heated to decomposition, an acrid smoke and irritating flames are emitted. Washer vapors are heavier than air and may travel long distances, near the ground, to a source of ignition and flash back.

<u>Explosion Sensitivity to Mechanical Impact:</u> Not sensitive.

Explosion Sensitivity to Static Discharge: Vapors may ignited by static electrical sparks.

6. Accidental Release Measures

Spill and Leak Response: Uncontrolled releases should be handled by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a spill: clear the area, protect people and respond with trained personnel. Minimum Personal Protective Equipment should be Level B: triple – gloves (rubber gloves and nitrile gloves over latex gloves), chemical resistant suit and boots, hardhat and self-contained breathing apparatus. Absorb spilled liquids with polypads or other suitable absorbent material. Avoid splashing or spraying material. Decontaminate the area thoroughly by rinsing with water. Place all spill residue in a double plastic bag and seal. Dispose of in accordance with all Federal. State and local hazardous waste regulations (see Section 13).

Part III How Can I Prevent Hazardous Situations From Occurring?

7. Handling and Storage

<u>Work and Hygiene Practices:</u> Avoid getting chemical IN YOU or ON YOU. Be sure to wash hands after handling chemicals. Do not eat or drink while handling chemicals. Follow <u>SPECIFIC USE INSTRUCTIONS</u> supplied with the product.

<u>Storage and Handling Practices:</u> Store product in properly labeled, closed containers, in a cool location, away from sources of ignition. Vapors may exist in "empty" containers which could ignite and explode if they come in contact with a source of ignition.

<u>Protective Practices During Maintenance of Contaminated Equipment:</u> Follow the practices indicated above. Make certain application equipment is locked out and tagged out safely. Make sure there is adequate ventilation where product is used. Decontaminate equipment, according

to the procedures under the "Accidental Release Measures" section before maintenance begins. Collect all rinse product and dispose of according to all applicable Local, State and Federal Procedures.

8. Exposure Controls – Personal Protection

Consult with a health/safety professional for specific recommendations.

<u>Ventilation and Engineering Controls:</u> Use with adequate ventilation. Use a mechanical fan or vent the area to outside.

Respiratory Protection: Maintain airborne contaminant concentrations below guidelines listed in Section 2. If respiratory protection is needed, use only protection authorized in CFR 29, 1910.134 or applicable State Regulations. Use Supplied Air Respiration Equipment if oxygen levels are below 19.5%. Use Self Contained Breathing Apparatus during release response procedures.

Eye Protection: Splash goggles or safety glasses.

<u>Hand Protection:</u> Use appropriate chemical resistant gloves. Check gloves for leaks. Use triple gloves during emergency response procedures. Wash hands after removing gloves.

Body Protection: Use body protection appropriate to task.

9. Physical and Chemical Properties

Vapor density (air = 1) 3.0 (heavier than air)

Evaporation rate (n-BuAc=1) no data Specific gravity 0.79

Boiling point 64.8°C (148.6°F)

Solubility in water soluble Vapor pressure, mmHg @ 21.2°C 100mm

Nonexempt Volatile Organic Compounds (CVOC) 100%

Appearance and Color: Purple, clear liquid with a characteristic pungent odor.

<u>How to detect Windshield Washer Fluid (warning properties):</u> There are no unusual warning properties associated with windshield washer solution.

10. Stability and Reactivity

Stability: Stable

<u>Conditions to avoid:</u> Extreme heat may cause product to decompose producing acrid smoke and irritating fumes.

<u>Materials with which substance is incompatible:</u> This substance is not compatible with strong oxidizing agents, acetyl bromide, alkyl aluminum solutions, beryllium hydride, boron trichloride,

carbon tetrachloride and metals, chloroform and sodium or sodium hydroxide, cyan uric chloride. dichloromethane and air, diethyl zinc, hydrogen and raney nickel catalyst.

Hazardous polymerization: Will not occur.

<u>Conditions to avoid</u>: Extreme heat and incompatible chemicals.

Part IV Is there any other useful information about this material?

11. Toxicological Information

Toxicity Data: The following information is for methanol (RTECS # PC1400000)

Orl-rat LD50: 5,628 mg/Kg
Ihl-rat LC50: 64,000ppm/4H
Orl-hmn LDLo: 143mg/Kg: EYE, PUL, GIT
Orl-hmn LDLo: 428 mg/kg: CNS, PUL
Orl-hmn LDLo: 4710 mg/Kg

Ihl-hmn TCLo: 300 ppm: EYE, CNS, PUL

<u>SUSPECTED CANCER AGENT:</u> Not found on Federal OSHA Z list, NTP, IARC or CAL/OSHA lists

<u>Medical Conditions Aggravated by Exposure:</u> Contact may aggravate pre-existing eye, skin, kidney nervous system respiratory pulmonary lung (asthma like) disorders.

Dermal exposure: Irritation of skin tissue

Ingestion exposure: Stomach pains, dizziness, drowsiness Inhalation exposure: Dizziness, drowsiness, confusion

Irritancy of Product: Can be irritating to contaminated tissue, especially after prolonged contact.

Reproductive Toxicity Information: Listed below is information concerning the effects of Methanol and washer components on the human body:

<u>Mutagenicity:</u> (a chemical that causes permanent changes to genetic material [DNA] such that changes will propagate through generation lines) Methanol is not reported to cause mutagenic effects in animals.

<u>Teratogenicity:</u> (a chemical that causes damage to a developing fetus, but the damage does not propagate through generational lines) Methanol has been reported to cause teratogenic effects in animals.

Reproductive Toxicity: (any substance that interferes in any way with the reproductive process) Methanol has been reported to cause reproductive toxicity effects in animals.

12. Ecological Information

<u>Environmental Stability:</u> Windshield Washer Solvent may biodegrade slowly in the environment, it will not hydrolyze in soil or water under normal environmental conditions. All work practices should be aimed at eliminating environmental contamination.

<u>Effect of Material on Plants or Animals:</u> Windshield Washer is a poison by ingestion and skin contact.

<u>Effect of Chemical on Aquatic Life:</u> High concentration may be detrimental to aquatic life. Biodegration in water may be slow, and at high concentrations can be toxic to microorganisms.

13. Disposal Considerations

<u>Preparing Wastes for Disposal:</u> Waste disposal must be in accordance with appropriate Federal, State and Local Regulations. This chemical, if unaltered by the handling, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

EPA Waste Numbers: F003, U154, D001 may be applicable to wastes containing methanol.

14. Transportation Information

This material is hazardous as defined by CFR 49, 172.101 as stated by The U.S. Department of Transportation.

<u>Proper Shipping Name:</u>
<u>Hazard Class Number and Description:</u>
Methanol Solution
3 (Flammable Liquid)

<u>UN Identification Number:</u> UN 1230

Packaging Group:

DOT Label(s) Required: Flammable Liquid

Emergency Response Guide Number: 131

RQ: 5000 Pounds Methanol

<u>Transport Canada, Transportation of Dangerous Goods Regulations:</u> This material is considered as Dangerous Goods. Use the above information for the preparation of Canadian Shipments.

15. Regulatory Information

<u>SARA Reporting Requirements:</u> Methanol is subject to the reporting requirements of Sections 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act.

TSCA Inventory Status: Methanol is listed on the TSCA Inventory.

Marine Pollutant: Windshield Washer Solvent contains no component listed as a Marine Pollutant Under CFR 49, 172.101, Appendix B.

<u>California Proposition 65:</u> Windshield Washer Solvent may contain ethanol, which is on the California Proposition 65 list as a chemical that causes reproductive harm.

CERCLA Reportable Quantities (RQ): 5,000 pounds for Methanol

<u>State Regulatory Information:</u> This chemical is covered under the following specific State Regulations:

Alaska – Designated Toxic and Hazardous Substance

California –Permissible Exposure Limits for Chemical Contaminants

Florida – Substance list

Kansas – Section 302/313 chemical

Massachusetts – Substance List

Minnesota – List of Hazardous Chemicals

Missouri – Employer information – Toxic Substance List

North Dakota – List of Hazardous Chemicals and Reportable Quantities

Pennsylvania – Hazardous Substance List

Rhode Island – Hazardous Substance List

Texas – Hazardous Substance List

West Virginia – Hazardous Substance List

Wisconsin – Toxic and Hazardous Substances

<u>Labeling (Precautionary Statements):</u> WARNING! Flammable. Toxic. May be fatal if swallowed or absorbed through skin. Keep away from heat, sparks, open flame. Keep container closed. Use with adequate ventilation. Avoid breathing vapor. Wash thoroughly after handling.

16. Other Information

The information contained herein is furnished without warranty of any kind. Users should consider this data only as a supplement to other information gathered by them. Users must make an independent determination of suitability plus completeness of information, from all sources, to assure proper use, disposal, safety of employees, safety of customers and protection of the environment when using this or any other chemical compound.

<u>Definition of Terms:</u> A large number of abbreviations and acronyms appear on a MSDS. Some of which are commonly used include the following:

CAS #: The Chemical Abstract Service Number which uniquely identifies each constituent. It is used for computer aided searching

Exposure Limits in Air:

ACGIH – American Conference of Governmental Industrial Hygienists; a professional association which establishes exposure limits.

TLV – Threshold Limit Value – and airborne concentration of a substance which represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse effect. The duration must be considered, including the 8 hour Time Weighted Average (**TWA**), the 15 minute Short Term Exposure Limit and the Instantaneous Ceiling Level.

Skin adsorption effects must also be considered.

OSHA: U.S. Occupational and Health Administration

PEL: Permissible Exposure Limit – this exposure value means exactly the same as TLV, except it is enforceable by OSHA.

IDLH: Immediately Dangerous to Life and Health – this represents a concentration from which an individual can escape within 30 minutes without suffering escape preventing or permanent injury.

DFG – MAK: The Republic of Germany's Maximum Exposure Level, similar to PEL.

NIOSH: The National Institute of Occupational Safety and Health which is the research arm for OSHA. NIOSH issues exposure guidelines called Recommended Exposure Levels (**REL's**). When no exposure levels are established, NE is made for reference.

Flammability Limits In Air: Much of the information related to fire and explosion is derived from the National Fire Protection Association (**NFPA**).

LEL: The lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.

UEL: The highest percentage of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.

Toxicological Information: Possible health hazards are derived from human data, animal studies or from the results of studies when similar compounds are present. Definitions of some terms in this section are:

LD50 – Lethal Dose (solids and liquids) which kills 50% of the exposed animals.

LC50 – Lethal Concentration (gases) which kills 50% of the exposed animals; ppm concentration expressed as parts per million of air or water; mg/m3 concentration expressed in weight of substance per volume of air; mg/kg quantity of material, by weight, administered to a test subject, based in their body weight in kg.

TDLo – The lowest dose to cause a symptom.

Tdo, **LDLo**, **Ldo** – The lowest dose to cause death.

Regulatory Information:

EPA – Environmental Protection Agency

WHMIS - Canadian Workplace Hazard Information System

DOT – Department of Transportation

CTC – Canadian Transportation Commission

SARA – Superfund Amendments and Reauthorization Act

TSCA – Toxic Substance Control Act

Proposition 65 – California's Safe Drinking Water Act

CERCLA or Superfund – Comprehensive Environmental Response, Compensation and Liability Act