MATERIAL SAFETY DATA SHEET

MATERIAL IDENTITY: -20F Super Tech Windshield Washer Fluid

SECTION 1 - MANUFACTURER'S INFORMATION

Manufacturer: Fox Packaging Company
51 East Maryland Avenue
St. Paul, MN 55117-4615

Telephone: (651) 489-8211

Facsimile: (651) 489-8247

Chemical Transportation Emergency Center (for immediate information about a chemical or to seek assistance from a manufacturer): 1-800-424-9300

National Response Center (to report spills of oil and hazardous material): 1-800-424-8802

Date Prepared: March 24, 2005

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Common Name: Windshield Washer Fluid

Product Use: Used for cleaning windshields

Product Identification: Windshield Washer Fluid

NFPA HAZARD RATINGS
HEALTH - 1
FLAMMABILITY - 3
REACTIVITY - 0
OTHER - NOT APPLICABLE

Hazardous Component*	Approximate Composition	OSHA Permissible Exposure Limit**	NIOSH REL	ACGIH Threshold Limit Value	IDLH (NIOSH)
Methanol (Methyl Alcohol) -CAS 67-56-1 -UN 1230 (DOT Guide 28)	30 percent by weight	200 ppm (260 mg/m^3) 8-Hour TWA (Skin)	200 ppm (260 mg/m^3) 8-Hour TWA 250 ppm (310 mg/m^3) Ceiling (Skin)	200 ppm (260 mg/m^3) 8-Hour TWA 250 ppm (310 mg/m^3) Short-term Exposure Limit (15-minute TWA) (Skin)	6,000 ppm (0.6 percent in air)

* The hazardous component listed is not a known or suspected human carcinogen as listed or determined by the National Agency for Research on Cancer, National Toxicological Program "NTP Seventh Annual Report on Carcinogens," or International Agency for Research on Cancer (IARC) monograph reviews. In addition, it is not considered a carcinogen by the Occupational Safety and Health Administration or the National Institute for Occupational Safety and Health.

** This MSDS contains the 1989 PEL's and from the June 1993 Air Contaminants Final Rule, specified in Tables Z-1, Z-2, and Z-3 [Federal Register; 58(124): 35338-35351; June 30, 1993].

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SECTION 3 - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: Approximately 180°F (for product)

Flash Point: 93°F

Solubility in Water: Soluble

Vapor Pressure: 100mm @ 21.2° (methanol)

Vapor Density: 1.11 (methanol)

Ionization Potential: 10.84 cV (methanol)

Freezing Point: -20°F

Appearance and Odor: The windshield washer is blue, and it has a mild characteristic pungent odor from the methanol. The odor threshold for methanol is 10 ppm.

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

Flammable Limits: UEL - 36 percent for methanol LEL - 6 percent for methanol

Autoignition Temperature: 878°F for methanol

Extinguishing Media for Methanol

Small Fires: Dry chemical, carbon dioxide, water spray or alcohol resistant foam.
Large Fires: Water spray, fog or alcohol-resistant foam.

Special Fire Fighting Procedures: Move container away from fire area if you can do so without risk. Dike fire control water for later disposal; do not scatter the material. Apply cooling water to the sides of containers exposed to flames until well after the fire is out.

Unusual Fire and Explosion Hazards for Methanol: Flammable/combustible material; may be ignited by heat, spark or flame. Vapors may travel to a source of ignition and flash back. Container may explode in heat of fire. Vapor explosion and poison hazard indoors, outdoors, or in sewers. Runoff to sewer may create fire or explosion hazard.

SECTION 5 - REACTIVITY DATA

Stability/Polymerization: In a closed container, methyl alcohol is stable at room temperature and it is stable under routine handling and storage. Hazardous polymerization will not occur.

Incompatibility (Material to Avoid): Incompatible with beryllium dihydride; metals; oxidants; potassium tert-butoxide; carbon tetrachloride + metals; dichloromethane. Can react vigorously with oxidizing materials.

Explosive reaction with chloroform + sodium methoxide; diethyl zinc. Violent reaction with alkyl aluminum salts; acetyle bromide; chloroform + sodium hydroxide; CrO_3; cyanuric chloride; (I + ethanol + HgO); $Pb(ClO_4)_2$; $HClO_4$; P_2O_3; (KOH + $CHCl_2$); nitric acid.[1]

Hazardous Decomposition or By-products: When methanol is heated to decomposition, carbon dioxide and carbon monoxide may be produced, as well as formaldehyde may be produced, and it emits acrid smoke and irritating fumes.

[1]Lewis, Richard J., Sr.: *Sax's Dangerous Properties of Industrial Materials, Eighth Edition.* New York, New York: Van Nostrand Reinhold, 1992.

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SECTION 6 - HEALTH HAZARD DATA

Routes of Entry (Methanol): The primary routes of entry are inhalation, ingestion, and absorption.

Health Hazards and Signs and Symptoms of Exposure (Methanol): Irritant to eyes, skin, and upper respiratory system. Headaches, drowsiness, dizziness, vertigo, light-headed, nausea, and vomiting. Visual disturbance, optic nerve damage, and blindness. Skin exposure hazard.

Target Organs: Central nervous system, digestive tract, eyes, and skin.

Acute Effects: Eye irritation. Inhalation can result nose irritation, headache, fatigue, nausea, visual impairment or complete and possible blindness, acidosis, convulsions, circulatory collapse, respiratory fatigue, and death. Ingestion can cause gastrointestinal (GI) irritation followed by the symptoms described for inhalation and possible kidney impairment. Skin contact results in a cold sensation, dryness, and cracking, possibly leading to dermatitis. Methyl alcohol may be absorbed through the skin and may cause headache, fatigue, and visual disturbances. Eye contact results in irritation with lacrimation, inflamed lids, and photophobia.

Chronic Effects: Chronic exposure may result in visual impairment or blindness.

Medical Conditions Generally Aggravated by Exposure: Ocular, respiratory, or dermal disorders may be aggravated by methanol exposure.

Emergency and First Aid Procedures:

Eyes:	Rinse with water 15 to 20 minutes, seek medical assistance.
Skin:	Flush with water for 15 minutes.
Inhalation:	Remove from source to fresh air, provide respiratory support as needed.
Ingestion:	Call Physician, hospital emergency room or Poison Control Center immediately. **GET PROMPT MEDICAL ATTENTION**

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be taken in Case Material is Released or Spilled:

- Keep unnecessary people away; isolate hazard area and deny entry.
- Stay upwind; keep out of low areas.
- Shut off ignition sources; no flares, smoking or flames in hazard area.
- Positive pressure self-contained breathing apparatus and chemical protective clothing is recommended for personnel involved in clean-up procedures with no fire.
- Do not walk through spilled material; stop leak if it can be done without risk.
- Water spray may reduce vapor; but it will not prevent ignition in closed spaces.

Waste Disposal Method: Dispose of in accordance with federal, state and local regulations.

EPA Designations:

RCRA Hazardous Waste (40 CFR 261.33): Hazardous Waste No. U154
CERCLA Hazardous Substance (40 CFR 302.4): Not Listed
SARA Extremely Hazardous Substance (40 CFR 355): Not Listed
SARA Toxic Chemical (40 CFR 372.65): Not Listed

DOT Designation: Based on flash point and alcohol content, this is a Class 3, combustible liquid.

SECTION 8 - SPECIAL PROTECTION INFORMATION

Respiratory Protection: Under normal use conditions (outdoor windshield cleaning), respiratory protection is not justified.

Protective Eye Wear: Splash goggles are recommended when handling the solution. Contact lens use is not recommended.

Protective Clothing: The selection of protective clothing and gloves is dependent upon anticipated exposure. As reported by the manufacturer, Best Glove style 725R (PVC) offers excellent protection for up to 240 minutes of complete immersion.

SECTION 9 - OTHER HAZARDOUS INFORMATION AND DEFINITIONS

OSHA PEL: The Occupational Safety and Health Administration's Permissible Exposure Limit, which is defined as the maximum concentration of contaminant to which a normal healthy individual may be exposed 8-hours per day, 40-hours per week, without experiencing adverse health effects over a working lifetime.

ACGIH TLV: American Conference of Governmental Industrial Hygienist's Threshold Limit Value, similar to the OSHA PEL but not considered a legal standard.

SECTION 10 – TRANSPORTATION INFORMATION

DOT HAZARD DESCRIPTION: combustible liquid., consumer commodity, ORM-D n.o.s (methanol) 3 UN1992 pgIII

MSDS Prepared by: Maxim Technologies, Inc.

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