SAFETY DATA SHEET

Prepared in accordance with
OSHA 2012 Hazard Communication Standard 29 CFR 1910.1200

SECTION 1: PRODUCT IDENTIFICATION

Manufacturer's Name: ESI
1101 Andrews Avenue
Youngstown, OH 44505
http://www.esrecycling.com

Emergency Telephone Number
PERS (800) 633 – 8253
Information Telephone Number
(888) 331 – 3443

Product Number: CVWWF-20B
Product Name: Windshield Washer Fluid
Date of Preparation: July 8, 2015 – Version 2.0

Use of substance/mixture: Windshield Washing Fluid
Formula: Proprietary

SECTION 2: HAZARDS IDENTIFICATION

GHS Signal Word: **WARNING**

GHS Classifications:

Flammable Liquid	Category 3
Acute Oral Toxicity	Category 4
Acute Dermal Toxicity	Category 3
Acute Inhalation Toxicity	Category 3

GHS Hazard Pictograms:

GHS Phrases:
Flammable liquid and vapor
Harmful if swallowed
Toxic in contact with skin
Toxic if inhaled

GHS Precautionary Statements:
Keep out of reach of children
Read label before use
Keep away from heat/sparks/open flames/hot surfaces. NO SMOKING!
Keep container tightly closed
Avoid breathing vapors/spray
Wash hands thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Wear protective gloves and eye protection
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
In case of fire: Used dry chemical, carbon dioxide, water spray or alcohol foam for extinction.

SECTION 3: COMPOSITION INFORMATION

Components	CAS Number	Weight %
Methanol	67-56-1	30.0 – 35.0%
Proprietary ingredients and water		Balance

SECTION 4: FIRST AID MEASURES

Eye Contact: Flush eye immediately with fresh water for 15 minutes. Remove contact lenses if worn. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical attention.

Skin: Remove any contaminated clothing. Wash skin with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists.

Ingestion: Get medical attention immediately. Call a physician or contact a poison control center. DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties:

Flash Point: 95º F (Closed Cup)

Flammable Limits: LEL – 6.7% UEL – 36.5%

Hazardous Combustion Products: Carbon dioxide, carbon monoxide, unidentified organic compounds. Decomposition and combustion materials may be toxic.

Extinguishing Media: Use dry chemical, carbon dioxide, water spray, or foam to extinguish all fires.

Fire Fighting Instructions: Water or foam may cause frothing. Water spray may be used to extinguish surrounding fire and cool exposed containers. Water spray will also reduce fume and irritant gases.

Wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. Toxic gases and vapors may be released if involved in a fire.

Fire and Explosion Hazards: Containers may explode when involved in a fire.

SECTION 6: ACCIDENTIAL RELEASE MEASURES

Protective Measures: Do not touch or walk through spilled product. Keep non-essential and unprotected personnel from entering the area. If spill occurs indoors, ventilate area and avoid breathing vapors or mist. A vapor suppressing foam may be used to reduce vapors.

Spill Management: Stop the source of the release if it can be done without risk. Contain release to prevent further contamination of soil, surface water or groundwater. DO NOT flush down public sewers or other drainage systems. Place contaminated materials in appropriate containers and dispose of in accordance with local, state, and federal regulations. Store in a cool, dry, well-ventilated area away from heat, sources of ignition and incompatibles.

Spill Reporting: Call the National Response Center (800) 424-8802 and appropriate state and local authorities if the quantity released over 24 hours is equal to or greater than 15,000 lb of CVWWF-20, based on a Reportable Quantity of 5,000 lbs for methanol.

SECTION 7: HANDLING AND STORAGE

Handling: DANGER: Harmful or Fatal if Swallowed. Do not drink methanol solution.
Avoid eye and prolonged or repeated skin contact. Avoid breathing vapors or mists. Wash exposed skin thoroughly with soap and water after use.

Storage: Do not store in opened or unlabeled containers. Keep container away from open flames and excessive heat. Do not reuse empty containers unless properly cleaned. Empty containers retain product residue and may be dangerous.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls: Use in a well-ventilated area. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits (see below). Have an eye wash station readily available where eye contact can occur.

Personal Protective Equipment: Personal protective equipment (PPE) selections vary based on the potential exposure conditions such as handling practices, concentration and ventilation. At a minimum safety glasses and skin protection should be worn. Additional PPE may be required based on specific working conditions.

Eye Protection:  Safety glasses equipped with side shields are recommended for minimal protection. Wear goggles if splashing or spraying for added protection.

Hand Protection:  Gloves should be nitrile, neoprene, Viton, polyvinyl chloride (PVC) or equivalent protection.

Skin Protection:  Uniforms or coveralls should provide adequate protection under normal working conditions. If prolonged contact is unavoidable, wear protective clothing made of neoprene, or nitrile. Remove contaminated clothing and launder before reuse. Heavily contaminate clothing and leather goods should be removed promptly and cleaned or discarded.

Respiratory Protection:  For operations where the TLV is exceeded a NIOSH approved respirator with organic vapor cartridges or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration. Select and use in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

Occupational Exposure Guidelines:

Substance	**Applicable Workplace Exposure Levels**	
	ACGIH	OSHA
Methanol	TWA: 200 ppm	TWA: 200 ppm

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Color:	Clear, blue	**Physical State:**	Liquid
Odor:	Mild alcohol	**Vapor Pressure:**	0. 5 mmHg @ 68º F (20º C)
pH:	NA	**Vapor Density**	1.1 (Air = 1) Based on Methanol
Boiling Point:	148º F (64.6º C)	**Solubility:**	100% Soluble in water
Freezing Point:	- 20º F (-28.9º C)	**Specific Gravity:**	0.95 – 0.96 g/ml (H_2O = 1)

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: Stable under normal temperatures and pressures.

Hazardous Polymerization: Not expected to occur.

Conditions to Avoid: Keep away from extreme heat, sparks, open flames, and strong oxidizers.

Incompatibility with Other Materials: Keep away from sulfuric and other strong inorganic acids, aluminum or lead (including equipment made of these materials), and oxidizing agents such as peroxides, nitric acids, perchloric acid or chromium trioxides.

Hazardous Decomposition Products: Thermal decomposition products may include oxides of carbon such a carbon dioxide and carbon monoxide.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity:

Oral: Harmful is swallowed
Dermal: Toxic in contact with skin
Inhalation: Dust, mist, vapor – Toxic if inhaled

METHANOL TOXICITY	
LD_{50} Oral Rat	> 5,000 mg/kg (1187 – 2769 mg/kg bodyweight)
LD_{50} Dermal Rad	15,800 mg/kg (Rabbit)
LC_{50} Inhalation Rat (mg/l)	85 mg/l/4 hr (Rat)
LC_{50} Inhalation Rat (ppm)	64,000 ppm/4 hr (Rat)
ATE US (oral)	100 mg/kg bodyweight
ATE US (dermal	300 mg/kg bodyweight
ATE US (gases)	700 ppm/4 hr
ATE US (vapors)	3 mg/l/4hr
ATE US (dust, mist)	1 mg/l/4h

Skin Corrosion/Irritation: Not Classified

Serious Eye Damage/Irritation: Not Classified

Germ Cell Mutagenicity: Not Classified

Carcinogenicity: Not listed in IARC, NTP, ACGIH, or OSHA as a carcinogen

Reproductive Toxicity: Not Classified

STOT – Single Exposure: Causes damage to organs – May cause blindness if swallowed

STOT – Repeated Exposure: Not classified

Aspiration Hazard: Not Classified

Symptoms/injuries after inhalation: May cause irritation of the nose and throat. High concentrations may cause acute central nervous system depression characterized by headaches, dizziness, nausea and confusion.

Symptoms/injuries after skin contact: Prolonged exposure to skin may cause skin irritation, experienced as burning, dryness, cracking and redness.

Symptoms/injuries after eye contact: May cause severe irritation

Symptoms/injuries after ingestion: May cause nausea, abdominal pain, headaches, shortness of breath, visual impairment and blindness. Severe poisoning can lead to come and death.

Chronic symptoms: On continuous/repeated exposure/contact: Red skin. Dry skin. Skin rash/inflammation. Headache. Feeling of weakness. Disturbed tactile sensibility. Visual disturbances. Sleeplessness. Gastrointestinal complaints. Cardiac and blood circulation effects.

SECTION 12: ECOLOGICAL INFORMATION

Environmental toxicity: DO NOT discharge into sewers or waterways.

Persistence and degradability	Readily biodegradable
Bioaccumulation	Mobile in soils
PBT/vPvB	This substance is not considered to be persistent, bioaccumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB).
Terrestrial Fate	The mobility of methanol in the subsurface will not be significantly limited by adsorption. Sorption of methanol to organic carbon is soil will be minor, and methanol will tend to remain in soil pore water.
Aquatic Fate	Methanol is completely miscible with water. Accordingly, its mobility in the subsurface will not be limited by solubility. Methanol has been shown to undergo rapid biodegradation in a variety of screening studies using sewage seed and activated sludge inoculum, which suggests that biodegradation, will occur in aquatic environments where the concentration does not inhibit bacterial activity.
Atmosphere Fate	Methanol has a vapor pressure of 127 mm Hg at 25° C and is expected to exist solely as a vapor in the ambient atmosphere.
Other Adverse Effects	Do not flush into surface water or sanitary system.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal of collected material must comply with federal, state and local regulations. The material, if spilled or discarded may be a regulated waste. Refer to federal, state and local regulations for regulated waste transport and disposal. The responsibility for proper waste disposal lies with the owner of the waste. Contact your ESI representative regarding proper recycling or disposal.

SECTION 14: TRANSPORTATION INFORMATION

US DOT Status:
UN Number: UN1230
DOT Proper Shipping Name: Methanol Solution
Exemptions: None
Transport Hazard Class: 3
Packing Group: PG III

SECTION 15: REGULATORY INFORMATION

TSCA Inventory: Components of this material are exempt from the requirements of the Toxic Substances Control Act Inventory.

SARA 302/304 Emergency Planning and Notification: The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355.

There are no components in this product on the SARA 302 list.

SARA 311/312 Hazard Identification: The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 311 and 312 to submit aggregate information on chemical by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories:

Immediate (Acute) Health Effects:	Yes
Delayed (Chronic) Health Effects:	Yes
Fire Hazard:	Yes
Sudden Release of Pressure Hazard:	No
Reactivity Hazard:	No

SARA 313 Toxic Chemical Notification and Release Reporting: This product contains methanol which is listed in 40 CFR 372 and therefore is subject to the requirements of Section 313 of SARA.

CERCLA: The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQs). Methanol present in this product is subject to CERCLA reporting.

State Regulations:

Massachusetts	Methanol is listed
New Jersey	Methanol is listed
New York	Methanol is listed
Pennsylvania	Methanol is listed
California Prop. 65	This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

SECTION 16: OTHER INFORMATION

NFPA Ratings: Health: 1
Flammability: 3
Reactivity: 0

HMIS Ratings: Health: 1
Flammability: 3
Reactivity: 0

0 – Least, 1 – Slight, 2 – Moderate, 3 – High, 4 – Extreme

These values are obtained using the guidelines or published evaluations by the National Fire Protection Association (NFPA) of the National Paint and Coating Association (for HMIS ratings).

LABEL RECOMMENDATION: Flammable Liquid – Contains Methanol

NOTICE: The information herein is based on data considered to be accurate at date of preparation. No warranty is made as to the accuracy or completeness of the foregoing data and safety information. No responsibility can be assumed by vendor for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.

Original Date: May 28, 2015
Revised Date: July 8, 2015 – Made changes to Section 14 – Transportation Information