Material Safety Data Sheet

Section 1 - Chemical Product and Company Information

Product Name: Windshield Washer Antifreeze (-20)

Preparation Date: 6/2008

Product Use: Windshield Washer Fluid

South/Win Ltd.

Revision Date: 10/2009

Address: 606 Walters Street Reidsville, NC 27320

Telephone: (336) 348-1808 Emergency Telephone Number: CHEMTREC: (800) 424-9300

Section 2 - Composition Information

Component	CAS #	%
Water	7732-18-5	60-70
Methanol	67-56-1	30-40

Section 3 – Hazards Identification

EMERGENCY OVERVIEW: Product is very HARMFUL. May be FATAL or cause blindness if swallowed

Potential Health Effects:

- Inhalation: Vapors may cause slight irritation to the mucous membranes. Exposure to vapors over an extended period of time may lead to toxic effects on the nervous system in general and the optic nerve in particular. Once absorbed into the body it is slowly eliminated. Symptoms include: headache, drowsiness, blurred vision, nausea, vomiting, coma and death. A person may get better after prolonged exposure but then could worsen again up to 30 hours later.
- Ingestion: This material is toxic when ingested. Death occurs usually after consuming 3 ounces of this product. Symptoms parallel symptoms observed during inhalation
- Skin Contact: May cause skin irritation through defatting which leads to dry and cracked skin. Skin absorption can occur leading to symptoms similar to those seen

through inhalation. Eye Contact: May cause eye irritation. Prolonged exposure can lead to eye lesions.

Chronic Effects: Marketed impairment of vision has been reported. Skin irritation has also been observed.

Aggravation of Pre-existing Conditions: Persons with pre-existing skin disorders, eye problems, or impaired liver or kidney functions may be more susceptible to the effects of this substance.

Section 4 – First Aid Measures

Inhalation: If inhaled, move to fresh air. If breathing is difficult, administer artificial (respiration (mouth to mouth) or oxygen as indicated. Contact a physician immediately.

Ingestion;/DO NOT DELAY. CONTACT A PHYSICIAN IMMEDIATELY! Induce vomiting as directed by medical personnel if victim is conscious. Do not give liquids to a drowsy, convulsing or unconscious person. If vomiting occurs spontaneously, keep head below the hips to prevent aspiration of material into the lungs. Seek medical attention immediately.

Oral LD 50: N/D

- Skin: Wash affected area with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. Contact a physician if irritation develops.
- Eyes: Elush with large amounts of cold water for at least 15 minutes. Do not let victim rub eyes. Contact a physician immediately.

Section 5 – Fire Fighting Measures

Flash Point: 33°C (91°F) Method Used: TAG

Extinguisher Media: Carbon dioxide, Dry chemical, Alcohol Foam.

Special Firefighting Procedures: Isolate fire area and deny unnecessary entry. Use dry chemical, alcohol foam or carbon dioxide. Water spray may be used only to keep fire exposed containers cool, protect personnel attempting to stop leak and disperse vapors. Protective Equipment: Firefighters should wear full protective clothing and NIOSHapproved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Unusual Fire and Explosion Hazards: None

HMIS Rating: Health 1 Flammability 3 Reactivity 0

NFPA Rating: Health 1 Flammability 3 Reactivity 0

Section 6 - Accidental Release Measures

Spill & Leak Response: Isolate spill area, remove all sources of ignition and ventilate area

of leaks and spills. Do not allow spilled material to enter sewers or streams. Using recommended protective equipment, contain and recover liquid if possible. Add dry material to absorb (if large spill, dike to contain). Using recommended protective equipment, pick up bulk of spill and containerize for recovery or disposal. Do not use combustible materials such as saw dust and do not flush material down the sewer.

Section 7 – Handling and Storage

- Handling: Avoid contact with skin, eyes and clothing. Do not wear contact lenses when handling this product. Keep out of reach of children. Wash thoroughly after handling.
- Work Practices: Use only in well ventilated areas. Keep containers tightly closed and keep away from heat and open flames.
- Storage: Store in closed containers in a cool, dry well ventilated area. Maintain closure of bungs. Do not reuse container. Avoid container damage while storing. Do not allow material to be stored above 20°C (68°F).

Empty Container Warning: Empty containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, bronze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity or other sources of ignition; they may explode and cause injury or death. Do not attempt to refill containers since residue is difficult to remove. Empty drums should be completely drained, properly bunged and returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner in accordance with governmental regulations. Section 8 – Exposure Controls/ Personal Protection

Exposure guidelines:

Methanol: OSHA Permissible Exposure Limit (PEL) – 200 ppm; ACGIH Threshold Limit Value – 200 ppm (Time Weighted Average), 250 ppm (Short Term Limit Value) skin

Respiratory Protection: General room ventilation should be satisfactory. Local exhaust ventilation may be necessary if misting is generated. If the exposure limit is exceeded, then a full-face respirator, airlined hood or full facepiece self-contained breathing apparatus must be worn

Protective Gloves: Wear neoprene rubber gloves, protective boots, gloves, lab coat, apron or overalls as appropriate to prevent skin contact

Eye Protection: Safety glasses with side shields or chemical goggles are required. Contact lenses should also not be worn if the product could be splashed into the eyes. Keep eye wash fountain and quick-drench facilities in work area.

Other Protective Wear: To prevent repeated and prolonged skin contact, wear impervious clothing and boots.

Work Practices: Read label for instructions in use of product

Section 9 - Physical/Chemical Characteristics

Appearance and Odor: Blue liquid, mild alcohol odor Boiling Point: $86^{\circ}C$ ($187^{\circ}F$) Flash Point: $33^{\circ}C$ ($91^{\circ}F$) Method Used: TAG Flammable Limits in air % by volume: N/D Auto-Ignition Temp: $470^{\circ}C$ ($878^{\circ}F$) as methanol UEL: 36% as methanol LEL: 6% as methanol Specific Gravity: 0.950 - 0.960 @ $20^{\circ}C$ ($68^{\circ}F$) Vapor Pressure @ $20^{\circ}C$: N/D Vapor Density: 1.1 (Air = 1) Solubility in Water: Miscible Freezing Point: $-29^{\circ}C$ ($-20^{\circ}F$) pH in water: 6 - 8

Section 10 – Stability and Reactivity

Stability: Stable X Unstable

Conditions to Avoid: Heat, flames, ignition sources and incompatibilities

Incompatibility: Strong acids, oxidizing agents and aluminum

Hazardous Decomposition Products: Oxides of carbon and formaldehyde

Hazardous Polymerization: May occur Will not occur X

Section 11 – Toxicological Data

Eye Irritation: N/D Dermal Toxicity Draize Test: 20 mg/ 24 hours Rabbit for Methanol Oral Toxicity: LD 50: 5,628 mg/kg, Rat for Methanol Inhalation Toxicity: LC50: 64,000 ppm/1 hour Rat for Methanol

Carcinogenicity:

NTP: N/D IARC: N/D ACGIH: N/D

Section 12 - Ecological Information

When released into the soil, this material is expected to readily degrade When released into the water, this material is expected to have a half-life between 1 and 10 days.

Persistence and Degradability: Not established.

Section 13 – Disposal Considerations

Waste Disposal: All recovered material should be packaged, labeled, transported and disposed or reclaimed in conformance with Good Engineering Practices. Comply with all applicable governmental regulations. Avoid land filling of liquids. Reclaim where possible.

Product can be disposed of in a licensed facility.

Section 14 – Transport Information

US Department of Transportation

Hazard Class/Division: 3 (Flammable liquid) Identification Number: UN1987 Packing Group: III Proper Shipping Name: Alcohols N.O.S. (Methanol) Product shipment size: In containers with greater than 5 liter capacity

Hazard Class: ORM-D; Quantities less than 5 liters

Section 15 - Regulatory Information

OSHA (Occupational Safety, and Health Administration) 29 CFR 1910.1200 Hazardous Chemical: yes

SARA (Superfund Amendment and Reauthorization Act)

Section 311: Hazardous Chemical - yes Immediate - yes Delayed - yes Fire - yes Sudden Release - no Reactive - no

Section 313: Toxic Chemical – yes Methanol: CAS # 67-56-1: 30-40%

CERCLA Reportable Quantities (RQ) SARA 302 Threshold Planning Quantities (TPQ)

None

TSCA (Toxic Substance Control Act)

All of the ingredients in this product are listed on the TSCA Inventory.

This product contains no listed substances known to the State of California to cause cancer, birth defects, or other reproductive harm, at levels which would require a warning under the statute.

Section 16 – Other Information

None

Disclaimer: The information contained herein is based on the data available to us and is believed to be correct. However, South/Win, Ltd. and/or the preparer makes no warranty, expressed or implied, regarding the accuracy of this information or the results to be

obtained from the use thereof. South/Win, Ltd assumes no responsibility for injury from the use of this product.