

# MATERIAL SAFETY DATA SHEET

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

### 1. Product Identification

Trade Name (As Labeled): Windshield Washer Solvent

Manufacturer's Name: Industrial Chemicals Corporation  
Address: 4711 W. 58<sup>th</sup> Avenue  
Arvada, CO 80002

Emergency Phone: 1-800-424-9300 (CHEMTREC)  
Business Phone: 303-427-2727

Date of Preparation: 01-Jan-08

### 2. Composition and Information on Ingredients

Methanol Synonyms: Methyl Alcohol, Carbinol, Methyl Hydroxide,  
Methylol, Wood Alcohol, Wood naphtha

| Chemical Name: | Cas #:  | %<br>W/W | Exposure Limits In Air |             |            |             |             |       |
|----------------|---------|----------|------------------------|-------------|------------|-------------|-------------|-------|
|                |         |          | ACGIH                  |             | OSHA       |             |             | OTHER |
|                |         |          | TLV<br>ppm             | STEL<br>ppm | PEL<br>ppm | STEL<br>ppm | IDLH<br>ppm |       |
| Methanol       | 67-56-1 | 30-70    | 200                    | 250         | 200        | 250         | 6000        |       |

NE = Not Established

CL = Ceiling Level See Section 16 for Definitions of Terms Used.

PART I, CONT.

**3. Hazard Identification**

**Emergency Overview:** This clear, colorless liquid with a characteristic pungent odor is flammable and toxic. Responders must protect against possible inhalation and contact exposure. Fire protection must be available to prevent or rapidly extinguish a fire.

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

Inhalation: Inhalation of Windshield Washer Solvent vapors may lead to irritation of the nose and throat. Symptoms of overexposure may include dizziness, coughing, headache, dyspnea, lachrymation, nausea and vomiting. Exposure to high concentrations of this material vapor may cause unconsciousness or death.

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

Target Organs: CNS, eyes, circulatory and respiratory systems.

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

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

Ingestion: Ingestion of one to four ounces of Windshield Washer Solvent can cause irreversible damage to the nervous system, blindness, or death. It cannot be made non-poisonous. Aspiration of the material into the lungs can cause chemical pneumonitis.

Injection: Injection of Windshield Washer Solvent can lead to redness and irritation of the surrounding tissue.

**Health Effects Or Risks From Exposure (An Explanation In Lay Terms):**

Acute: 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.

Chronic: Windshield Washer Solvent is eliminated slowly from the body. Therefore repeated exposures may build up to toxic levels in body tissues. Animal studies shows long term exposures to Methanol damages the CNS, kidneys or liver, skin disorders, and birth defects.

## PART I, CONT.

### 3. Hazard Identification, Cont.

| Hazardous Material Information System |                         |
|---------------------------------------|-------------------------|
| Health (Blue)                         | 3                       |
| Flammability (Red)                    | 3                       |
| Reactivity (Yellow)                   | 0                       |
| Protective Equipment                  |                         |
| 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 not to contaminate eyes. Victim and rescuers must seek immediate medical attention.

Eye Exposure: If chemical is splashed in eyes, open victim's eyes while under gentle running water. Use sufficient force to open eyelids. Have victim "roll" eyes. Minimum flushing is for 15 minutes.

Inhalation: If chemical is inhaled, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Remove or cover gross contamination to avoid exposure to rescuers.

Ingestion: If chemical is swallowed, Call Physician Or Poison Control Center For Most Current Information. Windshield Washer Solvent ingestion is life threatening – drink two glasses of water and induce vomiting, following emesis with drinking two teaspoons of baking soda in water. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow.

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

## PART II, CONT.

### 5. Fire-Fighting Measures

|  |   |
|--|---|
| <u>Flash Point, °F (closed cup):</u>           | 54°F                                      |
| <u>Autoignition Temperature, °F:</u>           | 878°F                                     |
| <u>Flammable Limits (in air by volume, %):</u> | <u>Lower:</u> 6.0%<br><u>Upper:</u> 36.5% |

Fire Extinguishing Materials: Windshield Washer Solvent is a flammable liquid which is a very dangerous fire hazard when exposed to heat, flames, and oxidizing materials.

Water Spray: OK  
Foam: OK

Carbon Dioxide: OK  
Dry Chemical: OK

Other:  
Halon: OK

|              |   |
|--------------|---|
| NFPA Ranking |   |
| Flammability | 3 |
| Health       | 3 |
| Reactivity   | 0 |
| Other        |   |

Special Fire Fighting Procedures: Incipient fire responders should wear eye protection. Structural fire fighters must wear Self-Contained Breathing Apparatus and full protective equipment.

Unusual Fire And Explosion Hazards: Water mixtures containing >20% methanol are flammable. Windshield Washer Solvent fires may not be visible. When heated to decomposition, Windshield Washer Solvent will emit acrid smoke and irritating fumes. Windshield Washer Solvent vapors are heavier than air and may travel long distances on the ground to a source of ignition and flash back.

Explosion Sensitivity to Mechanical Impact: Not sensitive.

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

## PART II, CONT.

### 6. Accidental Release Measures

Spill And Leak Response: Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a spill, clear the affected 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), chemically resistant suit and boots, hard-hat, and Self-Contained Breathing Apparatus**. Absorb spilled liquid with polypads or other suitable absorbent materials. Decontaminate the area thoroughly. Place all spill residue in a double plastic bag and seal. Dispose of in accordance with Federal, State, and local hazardous waste disposal regulations (see Section 13). Absorb spilled liquid with polypads or other appropriate materials. Avoid splashing or spraying liquid. Decontaminate area thoroughly by rinsing with soap and water.

## PART III

*How can I prevent hazardous situations from occurring?*

### 7. Handling and Storage

Work Practices and Hygiene Practices: Avoid getting chemicals ON YOU or IN YOU. Wash hands after handling chemicals. Do not eat or drink while handling chemicals. Follow SPECIFIC USE INSTRUCTIONS supplied with product.

Storage and Handling Practices: Store product in properly labeled, closed containers in cool location, away from sources of ignition. Vapors may exist in "empty" containers of Windshield Washer Solvent, which could ignite and explode if in contact with a source of ignition.

Protective Practices During Maintenance of Contaminated Equipment: Follow practices indicated above. Make certain application equipment is locked and tagged-out safely. Always use Windshield Washer Solvent in areas where adequate ventilation is provided. Decontaminate equipment, according to the procedures under the "Accidental Release Measures" section before maintenance begins. Collect all rinsates and dispose of according to applicable local, State, or Federal procedures.

## PART III, CONT.

### 8. Exposure Controls - Personal Protection

Consult with a health/safety professional for specific selection.

Ventilation and Engineering Controls: Use with adequate ventilation. Use a mechanical fan or vent 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 29 CFR 1910.134, or applicable State regulations. Use supplied air respiration protection if oxygen levels are below 19.5%. Use Self-Contained Breathing Apparatus during release response procedures.

Eye Protection: Splash goggles or safety glasses.

Hand Protection: Use appropriate chemical resistant gloves. Check gloves for leaks. Triple-glove during emergency response procedures from natural rubber are generally acceptable, depending upon the task. Wash hands after removing gloves.

Body Protection: Use body protection appropriate for task. Cover-alls, rubber aprons, or chemical protective clothing made from natural rubber are generally acceptable, depending upon the 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:              | 100 mm                 |
| Nonexempt Volatile Organic Compounds (CVOC) | 100%                   |

Appearance and Color: Blue, colorless solution with a characteristic, pungent odor.

How To Detect Windshield Washer Solvent (warning properties): There are no unusual warning properties associated with Windshield Washer Solvent.

## PART III, CONT.

### 10. Stability and Reactivity

Stability: Stable.

Conditions to Avoid: Extreme heat may cause product to decompose, producing acrid smoke and irritating fumes.

Materials with Which Substance is Incompatible: This substance is not compatible with strong oxidizing agents, acetyl bromide, alkylaluminum solutions, beryllium hydride, boron trichloride, with carbon tetrachloride and metals, chloroform and sodium or sodium hydroxide, cyanuric chloride, dichloromethane and air, diethylzinc, hydrogen and raney nickel catalyst.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Extreme heat and contact with 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: 64,000 ppm/4H  
orl-hmn LDLo:143 mg/Kg:EYE,PUL,GIT  
orl-hmn LDLo: 428 mg/Kg:CNS,PUL  
ihl-hmn TCLo: 300 ppm:EYE,CNS,PUL  
orl-mus LD50: 7300 mg/Kg.  
lpr-mus LD50: 10,765 mg/Kg.  
scu-mus LD50:9800 mg/Kg.  
ivn-mus LD50: 4710 mg/Kg.

SUSPECTED CANCER AGENT: Windshield Washer Solvent's ingredient's are not found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, CAL/OSHA.

## PART IV, CONT.

### 11. Toxicological Information, Cont.

Medical Conditions Aggravated by Exposure: 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: Windshield Washer Solvent can be irritating to contaminated tissue, especially after prolonged contact.

Reproductive Toxicity Information: Listed below is information concerning the effects of Methanol and its components on the human reproductive system.

Mutagenicity: (a chemical that causes permanent changes to genetic material (DNA) such that the changes will propagate through generational lines.) Methanol is not reported to cause mutagenic effects in animals.

Teratogenicity: (a chemical that causes damage to a developing fetus, but the damage does not propagate across 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

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

Effect of Material on Plants or Animals: Windshield Washer Solvent is a poison by ingestion and skin contact. Effect of Chemical on Aquatic Life: High concentrations of Windshield Washer Solvent solutions may be detrimental to aquatic life. Biodegradation in water can be slow, and at high concentrations, Windshield Washer Solvent can be toxic to microorganisms.

## PART IV, CONT.

### 13. Disposal Considerations

Preparing Wastes for Disposal: 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 consisting of Methanol.

### 14. Transportation Information

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

|   |                      |
|---|----------------------|
| <u>Proper Shipping Name:</u>                | Methanol Solution    |
| <u>Hazard Class Number and Description:</u> | 3 (Flammable Liquid) |
| <u>UN Identification Number:</u>            | UN 1230              |
| <u>Packing Group:</u>                       | II                   |
| <u>DOT Label(s) Required:</u>               | Flammable Liquid     |
| <u>Emergency Response Guide Number:</u>     | 131                  |
| <u>RQ:</u>                                  | 5000 Pounds Methanol |

Transport Canada Transportation Of Dangerous Goods Regulations: This Material Is Considered As Dangerous Goods. Use the above information for the preparation of Canadian Shipments.

### 15. Regulatory Information

Sara Reporting Requirements: 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 49 CFR 172.101, Appendix B.

California Proposition 65: Windshield Washer Solvent may contain ethanol, which is listed on the California Proposition 65 lists as a chemical that causes reproductive harm.

## PART IV, CONT.

### 15. Regulatory Information, Cont.

CERCLA Reportable Quantities (RQ): 5000 pounds (for Methanol).

State Regulatory Information: This chemical is covered under the following specific State regulations.

Alaska - Designated Toxic and Hazardous Substances  
California – Permissible Exposure Limits for Chemical Contaminates  
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 Quantity  
Pennsylvania - Hazardous Substance List  
Rhode Island - Hazardous Substance List  
Texas - Hazardous Substance List  
West Virginia - Hazardous Substance List  
Wisconsin - Toxic and Hazardous Substances

Labeling (Precautionary Statements): 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.

## PART IV, CONT.

### 16. Other Information

The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and protection of the environment.

#### Definitions Of Terms:

A large number of abbreviations and acronyms appear on a MSDS. Some of these which are commonly used include the following:

**CAS #:** This is the Chemical Abstract Service Number which uniquely identifies each constituent. It is used for computer-related searching.

#### **Exposure Limits In Air:**

**ACGIH** - American Conference of Governmental Industrial Hygienists, a professional association which establishes exposure limits.

**TLV** - Threshold Limit Value - an 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 Safety and Health Administration.

**PEL** - Permissible Exposure Limit - this exposure value means exactly the same as a TLV, except that it is enforceable by OSHA.

**IDLH** - Immediately Dangerous to Life and Health level represents a concentration from which one can escape within 30-minutes without suffering escape-preventing or permanent injury.

**DFG – MAK** - The Republic of Germany's Maximum Exposure Level, similar to the U.S. PEL.

**NIOSH** - The National Institute of Occupational Safety and Health, which is the research arm of the U.S. Occupational Safety and Health Administration (OSHA). NIOSH issues exposure guidelines called Recommended Exposure Levels (REL's). When no exposure guidelines are established, an entry of 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.

## PART IV, CONT.

### 16. Other Information, Cont.

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

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

**LD<sub>50</sub>** - Lethal Dose (solids & liquids) which kills 50% of the exposed animals;

**LC<sub>50</sub>** - Lethal Concentration (gases) which kills 50% of the exposed animals; ppm concentration expressed in parts of material per million parts of air or water; mg/m<sup>3</sup> concentration expressed in weight of substance per volume of air; mg/kg quantity of material, by weight, administered to a test subject, based on their body weight in kg.

**TDLo** - The lowest dose to cause a symptom

**TDo, LDLo, and LDo** - The lowest dose to cause death.

Regulatory Information:

**EPA** - U.S. Environmental Protection Agency.

**WHMIS** - Canadian Workplace Hazard information System.

**DOT** - U.S. 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