Section 1 - Identification

Product Name: Koncentrated Windshield Washer (AU13)

K-Chem, Inc. P.O. Box 530632 Birmingham, AL 35253-0632 205-592-0844

Emergency Phone: 800-255-3924

Product Use: Glass Cleaner at low temperatures

Section 2 - Hazards Identification

GHS Ratings:

Flammable liquid 3 Flash point \geq 23°C and \leq 60°C (140°F)

Oral Toxicity Acute Tox. 2 Oral>5+<=50mg/kg

Skin corrosive 3 Reversible adverse effects in dermal tissue, Draize score:

>= 1.5 < 2.3

Eye corrosive 2A Eye irritant: Subcategory 2A, Reversible in 21 days

Organ toxin repeated 1 Significant toxicity in humans- Reliable, good quality human

exposure case studies or epidemiological studies Presumed

significant toxicity in humans- Animal studies with significant and/or severe toxic effects relevant to humans at generally

low exposure (guidanc

GHS Hazards

H226	Flammable liquid and vapour
H300	Fatal if swallowed
H316	Causes mild skin irritation
H319	Causes serious eye irritation

H372 Causes damage to organs through prolonged or repeated exposure

GHS Precautions

P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking

P233 Keep container tightly closed

P240 Ground/bond container and receiving equipment

P241 Use explosion-proof electrical/ventilating/light equipment

P242 Use only non-sparking tools

P243 Take precautionary measures against static discharge
P260 Do not breathe dust/fume/gas/mist/vapours/spray

P264 Wash hands thoroughly after handling

P270 Do not eat, drink or smoke when using this product

P280 Wear protective gloves/protective clothing/eye protection/face protection

P314 Get Medical advice/attention if you feel unwell
P321 Specific treatment (see First Aid below or label)

P330 Rinse mouth

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.

Rinse skin with water/shower

P305+P351+P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact

lenses if present and easy to do - continue rinsing

P332+P313 If skin irritation occurs: Get medical advice/attention

P337+P313 Get medical advice/attention

P370+P378 In case of fire: Use Section 5 recommendations for extinction

Store in a well ventilated place. Keep cool

Dispose of contents/container in conformance with State, Local, and Federal

regulations.

Signal Word: Danger







Section 3 - Composition, Information on Ingredients

Chemical Name	CAS number	Weight Concentration %
Methanol	67-56-1	40.00% - 50.00%

Section 4 - First Aid Measures

Inhalation: If product vapors or mists cause respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. If symptoms persist, seek medical attention immediately.

Eye contact: Immediately flush eyes with large amounts of water for 15 minutes. Remove contact lenses after the first 5 minutes and continue rinsing, Hitting upper and lower eyelids occasionally. Obtain immediate medical attention, preferably from an ophthalmologist.

Skin contact: Flush skin with large amounts of water while removing contaminated clothing. Wash affected area with soap and water. Wash contaminated clothing and shoes thoroughly before reuse. Seek prompt medical attention if irritation persists.

Ingestion: Ingestion of methanol is potentially life threatening. Onset of symptoms may be delayed for 18 to 24 hours after digestion. Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. If conscious and alert, give 2 to 4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Indication of any immediate medical attention and special treatment needed

Advice to Doctor/Physician and Hospital Personnel: Effects may be delayed. Ethanol may inhibit methanol metabolism.

Most important symptoms and effects, both acute and delayed

Potential health symptoms and effects:

Eyes: Causes eye irritation characterized by redness, burning sensation, tearing, swelling and inflammation. May cause corneal injury and painful sensitization to light. Continued exposure may cause lesions. Vapors and fumes can cause eye irritation.

Skin: May cause skin irritation. Methanol is a defatting agent. Repeated or prolonged exposure may cause drying and cracking of skin. Absorption through the skin can be toxic. Symptoms may be similar to inhalation exposure. **Inhalation:** Irritating to mucous membranes and to the respiratory system. Causes central nervous system depression and particularly affects the optic nerve. Symptoms of over-exposure may include headache, drowsiness,

nausea, vomiting, blurred vision, blindness, narcosis, coma and death.

Ingestion: Ingestion of 100 -125 ml (-3 to 4 oz.) can be fatal or cause serious, irreversible injury such as blindness. Symptoms are similar to those for inhalation, but severity and speed of appearance may be greater. May cause central nervous system depression, characterized by excitement, followed by headache dizziness, drowsiness and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure.

Chronic: Prolonged or repeated contact with skin may defat tissue causing dermatitis or aggravate existing skin

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problems. Pre-existing skin, eye and respiratory disorders may be aggravated by exposure to this product. Impaired kidney, liver and central nervous system functions from pre-existing disorders may be aggravated by exposure to this product. Chronic exposures may cause reproductive disorders and teratogenic effects. Refer to Section 11.2.

Section 5 - Fire Fighting Measures

Flash Point: 30 C (86 F)

LEL: 6.00 UEL: 37.00

Suitable methods of extinction: Use media such as water fog, water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable methods of extinction: Methanol will float on water. As a result water using water jets or streams may spread the fire.

Special hazards arising from the substance or mixture: Flammable liquid and vapor. Methanol burns with a clean, clear flame that is almost invisible in daylight. Vapors may form an explosive mixture with air. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas. Vapors are easily ignited by heat, sparks or flame. Containers may explode if exposed to fire. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Symptoms of overexposure to these gases may not be apparent. Seek medical advice.

Responders should stay upwind. Full protective equipment including self-contained breathing apparatus should be used (HAZMAT suits) if there is liquid methanol or if vapor levels are above the threshold limit value (TLV). Water may be used to cool closed containers to prevent pressure build up and possible autoignition or explosion when exposed to extreme heat. If possible, firefighters should control run-off water to prevent environmental contamination.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Wear appropriate protective clothing designated in Section 8. Remove all sources of ignition. Ventilate the area. Keep unnecessary and unprotected personnel from entering the hazard area.

Environmental precautions: Do not Flush to sewer. Avoid dispersal of spilled material or run-off and prevent contact with scil and entry into drains, sewers or waterways.

Methods and materials for containment and cleaning up: Approach spill from upwind direction. Cover drains and contain spill. Recover liquid where possible, or dilute with water or use alcohol-resistant foam to reduce fire hazard. Collect liquid in an approved container, or cover with a large quantity of inert absorbent. Do not use combustible material such as sawdust. Collect product using non-sparking tools and place into approved container for proper disposal. Observe possible possible material restrictions (Sections 7.2 and 10.5). Clean contaminated area with soap and water.

Section 7 - Handling & Storage

Precautions for safe handling: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition. No smoking. Wear all appropriate protective equipment specified in Section 8. Wash hands thoroughly after handling. Remove contaminated clothing and wash before reuse. Keep containers closed when not in use.

Advice on protection against fire and explosion Keep away from heat, sparks and flame. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use non-sparking type tools and equipment, including explosion proof ventilation.

Conditions for safe storage, including any incompatibilities: Store in cool, dry, well-ventilated storage areas in closed containers. Keep away from oxidizers, acids and bases. Transfer to approved containers having correct labeling. DO NOT store in aluminum or lead containers. (Anhydrous methanol is non-corrosive to most metals at ambient temperatures except lead and magnesium. Coatings of copper and its alloys, zinc or aluminum are unsuitable for storage as they are attacked slowly. Mild Steel is the recommended construction material for tanks.)

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Plastics may be used for short-term storage, but are not recommended for long-term use due to deterioration effects and the subsequent risk of contamination. Empty containers retain product residue {liquid and/or vapor) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, sparks, flame, static electricity or other sources of ignition. Outside or detached storage is recommended. Tanks must be grounded, vented and have vapor emission controls including floating roofs, inert gas blanketing to prevent the formation of explosive mixtures and pressure vacuum relief valves to control tank pressures. Tanks should be of welded construction and should also be diked.

Section 8 - Exposure Controls/Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Methanol	PEL: 200 ppm	ACGIH* TLV-TWA: 200	Not Established
67-56-1	TWA: 250 mg/m3	ppm, skin;	
		TLV-STEL: 250 ppm, skin	
		PEL-TWA: 200 ppm, skin	
		PEL-STEL: 250 ppm, skin	
		IDLH: 6000 ppm, acute	
		inhalation	
		toxicity to animals	
		TLV Basis, critical effects:	
		neuropathy,	
		vision, central nervous	
		system(CNS)	

Individual protection measures: The level of risk of exposure to methanol will dictate the appropriate level of personal protective equipment (PPE) required. Wear protective clothing and chemical resistant footwear to prevent repeated or prolonged contact with methanol. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.

PPE must not be considered a long-term solution to exposure control. PPE usage must be accompanied by employer programs to properly select, maintain, clean fit and use. Consult a competent industrial hygiene resource to determine hazard potential and/or the PPE manufacturers to ensure adequate protection.

Individual protection measures: Wear protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.

Eye/face protection: Wear protective chemical goggles and a face shield use. Refer to 29 CFR 1910.133, ANSI Z87.1 or European Standard EN 166.

Hand Protection: Wear rubber (butyl or nitrile) or neoprene gloves for protection against materials in Section 3. Gloves should be impermeable to chemicals and oil. Breakthrough time of selected gloves must be greater than the intended use period.

Other protective equipment: Protective clothing. Protective boots, if the situation requires.

Respiratory Protection: Always use an approved respirator when vapor/aerosols are generated. Where risk assessment shows air-purifying respirators are appropriate use a full-faced respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Environmental exposure controls: Do not empty into drains.

Hygiene measures: Facilities storing or using this material should be equipped with an eyewash station and safety shower. Change contaminated dotting. Preventive skin protection is recommended. Wash hands thoroughly after use, before eating, drinking or using the lavatory.

Section 9 - Physical & Chemical Properties

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Boiling Point 65 °C

Color Blue

Specific Gravity 0.931

Odor Threshold N/A

Boiling Range 150

Evaporation Rate N/A

Solubility in Water Complete

Flammability N/A

Partition coefficient: n- N/A octanol/water

Decomposition temperature N/A

Appearance Clear Liquid

pH 11 - 12

Odor Alcohol

Freezing Point -40

Flash Point 30 F

Vapor Pressure N/A

Viscosity <=10

Upper/lower flammability N/A

Auto-ignition temperature N/A

Section 10 - Stability & Reactivity

STABLE

Incompatibilities:

Avoid contact with strong oxidizing agents, strong mineral or organic acids, strong bases and halogenated hydrocarbons. Contact with these may cause a violent or explosive reaction. May be corrosive to lead, aluminum, magnesium and platinum.

Hazardous Decomposition:

Thermal decomposition products include oxides of carbon, formic acid, formaldehyde and other toxic fumes and gases.

Hazardous polymerization will not occur.

Section 11 - Toxicological Information

Mixture Toxicity

Oral Toxicity LD50: 48mg/kg

Component Toxicity

67-56-1 Methanol

Oral LD50: 20 mg/kg (RAT)

<u>CAS Number</u> <u>Description</u> <u>% Weight</u> <u>Carcinogen Rating</u>

Section 12 - Ecological Information

Component Ecotoxicity

Section 13 - Disposal Considerations

Section 14 - Transportation Information

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AgencyProper Shipping NameUN NumberPacking GroupHazard ClassDOTFlammable Liquid Toxic, n.o.s (containing methanol)199213(6.1)

Section 15 - Regulatory Information

Country Regulation All Components Listed

EU Risk Phrases

Safety Phrase

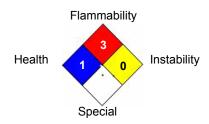
- None

Section 16 - Other Information

Hazardous Material Information System (HMIS)

HEALTH 2 FLAMMABILITY 3 PHYSICAL HAZARD 0 PERSONAL PROTECTION D HMIS & NFPA Hazard Rating Legend * = Chronic Health Hazard 0 = INSIGNIFICANT 1 = SLIGHT 2 = MODERATE 3 = HIGH

National Fire Protection Association (NFPA)



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Reviewer Revision

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