

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: KQ 105A

Chemical Formula: Mixture

CAS Number: A mixture of 68909-18-2 and 67-56-1

Synonyms: Mixture of Alkyl Pyridine Quaternary Salts in Methanol

General Use:

Manufacturer: KMCO, LP, 16503 Ramsey Road, Crosby, Texas 77532, Phone (281) 328-3501, FAX (281) 328-9528

24-HOUR EMERGENCY NUMBER: CHEMTREC 1-800-424-9300

Section 2 - Composition / Information on Hazardous Ingredients

Ingredient Name	CAS Number	% wt <i>or</i> % vol
Alkyl Pyridine Quaternary Salt	68909-18-2	75
Methanol	67-56-1	25

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
Alkyl Pyridine Quaternary Salt	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Methanol	200 ppm	none estab.	200 ppm	250 ppm	200 ppm	250 ppm	6000 ppm

Section 3 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

POISON! DANGER! VAPOR HARMFUL. MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. CANNOT BE MADE NONPOISONOUS. FLAMMABLE LIQUID AND VAPOR. CAUSES IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM AND LIVER

HMIS	
H	3
F	3
R	1

Potential Health Effects

Acute Effects

Inhalation: A slight irritant to the mucous membranes. Toxic effects exerted upon nervous system, particularly the optic nerve. Once absorbed into the body, it is very slowly eliminated. Symptoms of overexposure may include headache, drowsiness, nausea, vomiting, blurred vision, blindness, coma, and death. A person may get better but then worse again up to 30 hours later.

Eye: Irritant. Continued exposure may cause eye lesions.

Skin: Methanol is a defatting agent and may cause skin to become dry and cracked. Skin absorption can occur and produce toxic effects similar to those resulting from inhalation exposure (see above).

Ingestion: Swallowing only 1 to 4 ounces has been reported to cause death or serious irreversible injury such as blindness. Methanol metabolism causes systemic acidosis resulting in damage to the optic nerve. Symptoms may be delayed.

Carcinogenicity: IARC, NTP, and OSHA do not list any of the components of this mixture as a carcinogen.

Medical Conditions Aggravated by Long-Term Exposure: May aggravate existing skin disorders, eye problems, impaired liver function, impaired kidney function, or CNS disease.

Chronic Effects: Marked impairment of vision and enlargement of the liver has been reported. Repeated or prolonged exposure may cause skin irritation.

Section 4 - First Aid Measures

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

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Skin Contact: Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Dispose of contaminated clothing in accordance with all local, state, and Federal regulations.

Ingestion: Induce vomiting as directed by medical personnel. Keep head below hips to prevent aspirations into lungs. Never give anything by mouth to an unconscious person. Call a physician immediately.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Note to Physicians: Ingestion of this product, even in small amounts, can cause blindness and death.

Onset of symptoms may be delayed for 18-24 hours. Treatment prior to onset of symptoms may be life saving. Methanol is rapidly absorbed, so induce vomiting ASAP (within 30 minutes of ingestion) to be most effective. Ethanol inhibits formation of toxic metabolites. If indicated, start with a loading dose of 7.6-10 ml/kg of body weight of 10% EtOH in D5W over 30-50 minutes; maintenance dose of 1.4mg/kg to achieve 100-130 mg/dl blood EtOH level during ethanol therapy. (if charcoal is administered, ethanol should be administered intravenously and not orally.)

Special Precautions/Procedures: Maintain contact with the Poison Control Center during all aspects of the diagnosis and treatment. Refer to API's Publication 4524 entitled "Clinical Toxicology of the Acute Ingestion of Methanol/Hydrocarbon Blends" for additional information regarding medical monitoring and treatment.

Section 5 - Fire-Fighting Measures

Flash Point: 77 °F (25 °C)

Flash Point Method: CC

Burning Rate: Not Determined

Autoignition Temperature: 867 °F (464 °C) [methanol]

LEL: 6.0 % v/v [methanol]

UEL: 36 % v/v [methanol]

Flammability Classification: Flammable liquid and vapor

Extinguishing Media: Dry chemical, foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak, and disperse vapors.

Unusual Fire or Explosion Hazards: This material releases vapors at or below ambient temperatures. When mixed with air in certain proportions and exposed to an ignition source, these vapors can burn in the open or explode in confined spaces. Being heavier than air, flammable vapors may travel long distances along the ground before reaching a point of ignition and flashing back. Contact with strong oxidizers may cause fire. Sealed containers may rupture when heated.

Hazardous Combustion Products: Carbon monoxide, carbon dioxide, formaldehyde, and unidentified organic compounds.

Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.

Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode.



Section 6 - Accidental Release Measures

Spill /Leak Procedures: Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Use non-sparking tools and equipment. Do not flush to sewer.

Small Spills: Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material (e.g. vermiculite, dry sand), and place in a chemical waste container. Do not use combustible materials, such as sawdust.

Large Spills

Containment: Wear respirator and protective clothing as appropriate. Shut off source of leak if safe to do so. For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.

Cleanup: Contain and recover liquid when possible. Collect liquid in appropriate container. Absorb residue with an inert material. Consult with your environmental department for detailed clean up instructions.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120). CERCLA requires reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

Section 7 - Handling and Storage

Handling Precautions: Protect against physical damage. Containers should be bonded and grounded for transfers to avoid static sparks. Use non-sparking type tools and equipment, including explosion proof ventilation. Do not attempt to clean empty containers.

Storage Requirements: Store out of direct sunlight in a cool, well-ventilated area. Separate from incompatibles. Outside or detached storage is preferred.

Regulatory Requirements: This product contains the following chemical(s) subject to the reporting requirements of SARA Title III Section 311, 312, and 313: Methanol (Methyl Alcohol).

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Controls should be such that adequate ventilation is provided.

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls: Normal industrial requirements should be in place.

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or nonroutine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance and Odor: Dark brown viscous liquid with pyridine-type odor.

Odor Threshold: Not Determined

Vapor Pressure: 97 mm Hg at 68 °F (20 °C) [methanol]

Vapor Density (Air=1): >1

Formula Weight: Mixture

Density: 8.56 lb/gal

Specific Gravity (H₂O=1, at 4 °C): 1.028

pH: 5

Water Solubility: Dispersible

Other Solubilities: Not Available

Boiling Point: Not Determined

Freezing/Melting Point: Not Determined

Viscosity: Not Determined

Refractive Index: Not Determined

Surface Tension: Not Determined

% Volatile: Not Determined

Evaporation Rate: Not Determined

Section 10 - Stability and Reactivity

Stability: KQ 105 A is stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: Hazardous polymerization cannot occur.

Chemical Incompatibilities: Oxidizing Agents

Conditions to Avoid: Heat, sparks, open flame, and oxidizing conditions.

Hazardous Decomposition Products: Thermal oxidative decomposition of KQ 105AA can produce carbon monoxide, carbon dioxide, formaldehyde, and unidentified organic compounds.

Section 11 - Toxicological Information

Toxicity Data:*

Eye Effects: Rabbit, 100mg/24 hr, moderate [methanol]

Skin Effects: Rabbit, 20mg/24 hr, moderate [methanol]

Acute Inhalation Effects:

Human, inhalation, TC_{LO} : Data not available.

Rat, inhalation, LC_{50} : 64000 ppm/4hr [methanol]

Acute Oral Effects:

Rat, oral, LD_{50} : 5628 mg/kg mg/kg [methanol]

Chronic Effects: Marked impairment of vision and enlargement of the liver has been reported. Repeated or prolonged exposure may cause skin irritation. [methanol]

Carcinogenicity: Not a listed carcinogen.

Mutagenicity: Methanol has been investigated as a mutagen.

Teratogenicity: Methanol may cause birth defects.

* See NIOSH, *RTECS*, for additional toxicity data.

Section 12 - Ecological Information

Ecotoxicity: This material is expected to be slightly toxic to aquatic life.

Environmental Fate: Data not available.

Environmental Degradation: Data not available.

Soil Absorption/Mobility: Data not available.

Section 13 - Disposal Considerations

Whatever cannot be saved for recovery or recycling should be disposed of in an approved waste facility, in accordance with applicable Federal, State/Provincial and Local requirements. May be a RCRA hazardous waste due to the ignitability characteristic.

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Flammable Liquid, n.o.s. (contains methanol)

Shipping Symbols: N/A

Hazard Class: 3

ID No.: UN 1993

Packing Group: III

Label: 3, Flammable Liquid

Special Provisions (172.102): None

Packaging Authorizations

a) **Exceptions:** 173.150

b) **Non-bulk**

Packaging: 173.202

c) **Bulk Packaging:** 173.242

Quantity Limitations

a) **Passenger, Aircraft, or Railcar:**

60L

b) **Cargo Aircraft Only:** 220L

Vessel Stowage Requirements

a) **Vessel Stowage:** A

b) **Other:** None

Section 15 - Regulatory Information

EU REACH - NOT REGISTERED AND CANNOT BE EXPORTED INTO THE EU.

EPA Regulations:

RCRA Hazardous Waste Number (40 CFR 261.33): U154 (contains methanol)

RCRA Hazardous Waste Classification (40 CFR 261.33): Ignitable (contains methanol)

CERCLA Hazardous Substance (40 CFR 302.4) listed (methanol) specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec. 307(a), CAA, Sec. 112

CERCLA Reportable Quantity (RQ) (40 CFR 302.4): Methanol 5,000 lbs. (i.e. Product 20,000 lbs)

SARA 311/312 (40 CFR 370) Codes: Acute Health, Chronic Health, Fire Hazard (1,3,4) [contains methanol]

SARA 313 Toxic Chemical (40 CFR 372.65): Methanol.

SARA 304 EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed, Threshold Planning Quantity (TPQ)

OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1): Methanol 200 ppm.

OSHA Specifically Regulated Substance (29CFR 1910): Not listed
California Proposition 65 ingredients: None

Section 16 - Other Information

Prepared By: KMCO, LP

Revision Notes: All sections revised as part of conversion to 16 Section format.

Additional Hazard Rating Systems: None.

Disclaimer: This product is FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY.

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