

### Section 1 - Chemical Product and Company Identification

**Product/Chemical Name:** KB2405

**Chemical Formula:** Mixture

**CAS Number:** A mixture of 30846-35-6, 1330-20-7, 64742-94-5, 100-41-4

**Synonyms:** Phenol Formaldehyde Resin Alkoxyate

**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	OSHA PEL		ACGIH TLV		NIOSH REL		% wt <i>or</i> % vol
Ingredient	TWA	STEL	TWA	STEL	TWA	STEL	NIOSH IDLH
Alkoxylated Phenol Formaldehyde Resin							75-81
Xylenes							11-19
Heavy Aromatic Naphtha							3-6
Ethyl Benzene							1-2
First_Ingredient	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
m-Xylene	100 ppm	none estab.	100 ppm	150 ppm	100 ppm	150 ppm	900 ppm
o-Xylene	100 ppm	none estab.	100 ppm	150 ppm	100 ppm	150 ppm	900 ppm
p-Xylene	100 ppm	none estab.	100 ppm	150 ppm	100 ppm	150 ppm	900 ppm
Heavy Aromatic Naphtha	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Ethylbenzene	100 ppm	none estab.	100 ppm	125 ppm	100 ppm	125 ppm	800 ppm

### Section 3 - Hazards Identification

#### ☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

DANGER! HARMFUL OR FATAL IF SWALLOWED. VAPOR HARMFUL, AFFECTS CENTRAL NERVOUS SYSTEM. CAUSES SEVERE EYE IRRITATION. CAUSES IRRITATION TO SKIN AND RESPIRATORY TRACT. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. CHRONIC EXPOSURE CAN CAUSE ADVERSE LIVER, KIDNEY, AND BLOOD EFFECTS. FLAMMABLE LIQUID AND VAPOR.

HMIS	
H	2
F	3
R	0

#### Potential Health Effects

##### Acute Effects

**Inhalation:** Inhalation of vapors may be irritating to the nose and throat. Inhalation of high concentrations may result in nausea, vomiting, headache, ringing in the ears, and severe breathing difficulties which may be delayed in onset. Substernal pain, cough, and hoarseness are also reported. High vapor concentrations are anesthetic and are central nervous system depressants.

**Eye:** Vapors cause eye irritation. Splashes cause severe irritation, possible corneal burns and eye damage.

**Skin:** Skin contact results in loss of natural oils and often results in a characteristic dermatitis. May be absorbed through the skin.

**Ingestion:** Ingestion causes burning sensation in mouth and stomach, nausea, vomiting and salivation. Minute amounts aspirated into the lungs can produce a severe hemorrhagic pneumonitis with severe pulmonary injury or death.

**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:** Persons with pre-existing skin disorders or eye problems, or impaired liver, kidney, blood, or respiratory function may be more susceptible to the effects of this product.

**Chronic Effects:** Chronic inhalation can cause headache, loss of appetite, nervousness and pale skin. Repeated or prolonged skin contact may cause a skin rash. Repeated exposure of the eyes to high concentrations of vapor may cause reversible eye damage. Repeated exposure can damage bone marrow, causing low blood cell count. May damage the liver and kidneys.

#### 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:** Aspiration hazard. If swallowed, vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, 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:** There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

**Special Precautions/Procedures:** None.

#### Section 5 – Fire-Fighting Measures

**Flash Point:** 95 °F

**Flash Point Method:** CC

**Burning Rate:** Not Determined

**Autoignition Temperature:** 867 °F (464 °C) data for xylene

**LEL:** 1.0 % v/v (data for xylene)

**UEL:** 7.0% v/v (data for xylene)

**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:** Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Contact with strong oxidizers may cause fire. Sealed containers may rupture when heated. Sensitive to static discharge.

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

**Fire-Fighting Instructions:** Do not use direct water stream to extinguish fires. Product may travel with water and reignite. Vapors can flow along surfaces to distant ignition source and flash back. 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. Wear full protective clothing.



#### 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: Xylene, Ethylbenzene.

### 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 liquid with aromatic odor

**Odor Threshold:** Not Determined

**Vapor Pressure:** 10 mmHg @ 28° C

**Vapor Density (Air=1):**

**Formula Weight:** Mixture

**Density:** 8.5 #/GAL @ 60° F

**Specific Gravity (H<sub>2</sub>O=1, at 4 °C):** 1.0

**pH:** 8 - 12

**Water Solubility:** Insoluble

**Other Solubilities:** Not Determined

**Boiling Point:** 285°F

**Freezing/Melting Point:** < -6°F

**Viscosity:** Not Determined

**Refractive Index:** Not Determined

**Surface Tension:** Not Determined

**% Volatile:** Not Determined

**Evaporation Rate(BuAc=1):** < 0.1

### Section 10 - Stability and Reactivity

**Stability:** KB2405 is stable at room temperature in closed containers under normal storage and handling conditions.

**Polymerization:** Hazardous polymerization cannot occur.

**Chemical Incompatibilities:** Strong oxidizing agents.

**Conditions to Avoid:** Heat, flames, ignition sources and incompatibles.

**Hazardous Decomposition Products:** Thermal oxidative decomposition of KB2405 can produce carbon monoxide, carbon dioxide, and unidentified organic compounds.

### Section 11 – Toxicological Information

#### Toxicity Data:\*

**Eye Effects:** Vapors cause eye irritation. Splashes cause severe irritation, possible corneal burns and eye damage.

**Skin Effects:** Skin contact results in loss of natural oils and often results in a characteristic dermatitis. May be absorbed through the skin.

#### Acute Inhalation Effects:

Human, inhalation, TC<sub>LO</sub>: Data not available

Rat, LC<sub>50</sub>(xylene): 5000 ppm/4H

#### Acute Oral Effects:

Rat, oral, LD<sub>50</sub>(xylene): 4300 mg/kg

Rat, oral, LD<sub>50</sub>(ethyl benzene): 3500 mg/kg

**Chronic Effects:** Repeated exposure can damage bone marrow and may damage the liver and kidneys.

**Carcinogenicity:** Not Classifiable as to Human Carcinogenicity

**Mutagenicity:** Investigated as a mutagen.

**Teratogenicity:** May cause teratogenic effects.

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

### Section 12 – Ecological Information

**Ecotoxicity:** For xylene: This material is expected to be slightly toxic to aquatic life. The LC<sub>50</sub>/96-hour values for fish are between 10 and 100 mg/L.

**Environmental Fate:** For xylene: When released into the soil, this material may evaporate to a moderate extent. When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material may biodegrade to a moderate extent. When released into the air, this material may be moderately degraded by reaction with photochemically produced hydroxyl radicals. When released into the water, this material may evaporate to a moderated extent.

**Environmental Degradation:** This material is not expected to bioaccumulate.

**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 xylenes, ethyl benzene)

**Shipping Symbols:** N/A

**Hazard Class:** 3

**ID No.:** UN1993

**Packing Group:** III

**Label:** 3, Flammable Liquid

**Special Provisions**

(172.102): None

**Packaging Authorizations**

a) **Exceptions:** 173.150

b) **Non-bulk Packaging:**

173.203

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): U239 (contains xylenes)

RCRA Hazardous Waste Classification (40 CFR 261): Ignitable (contains xylenes)

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

CWA, Sec. 307(a), CAA, Sec. 112 (contains xylenes, ethylbenzene)

CERCLA Reportable Quantity (RQ) (40 CFR 302.4): Xylene, 100 lbs.; Ethylbenzene, 1,000 lbs.

SARA 311/312 (40 CFR 370) Codes: Acute Health, Chronic Health, Fire Hazard (1,3,4) [contains xylenes]  
SARA 313 Toxic Chemical (40 CFR 372.65): Listed effective 1/1/87 (xylenes)  
SARA 304 EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed

**OSHA Regulations:**

Air Contaminant (29 CFR 1910.1000, Table Z-1): Xylene 100 ppm, Ethylbenzene 100 ppm  
OSHA Specifically Regulated Substance (29CFR 1910): Not listed

**California Proposition 65 ingredients:**

Ethylbenzene

**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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