

Section 1 - Chemical Product and Company Identification**Product/Chemical Name:** KB3208**Chemical Formula:** Mixture**CAS Number:** Mixture of 68400-72-6 and 108-88-3**Synonyms:** Polyglycerol Fumarate Ester**General Use:** Various**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	
Polyglycerol Fumarate Ester	68400-72-6		87	
Toluene	108-88-3		13	

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
Polyglycerol Fumarate Ester	none	none	none	none	none	none	none
	estab.	estab.	estab.	estab.	estab.	estab.	estab.
Toluene	200 ppm	300 ppm	50 ppm	none	100 ppm	150 ppm	500 ppm
				estab.			

Section 3 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆
 WARNING! FLAMMABLE. CAUSES EYE IRRITATION.

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, and headache.

Eye: Vapors cause eye irritation. Splashes cause eye irritation.

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: May aggravate an existing dermatitis, throat, or respiratory condition.

Chronic Effects: Unknown.

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: 88 °F (31 °C)

Flash Point Method: CC

Burning Rate: Not Determined

Autoignition Temperature: 997°F (data for toluene)

LEL: 1.0 % v/v

UEL: 7.0% v/v

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.

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: Toluene.

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: Pale amber liquid with aromatic odor.

Odor Threshold: Not Determined

Vapor Pressure: Not Determined

Vapor Density (Air=1): >1.0

Formula Weight: Mixture

Density: 8.42 lb/gal

Specific Gravity (H₂O=1, at 4 °C): 1.01

pH: 6 - 8

Water Solubility: Insoluble

Other Solubilities: Not Available

Boiling Point: Not Determined

Freezing/Melting Point: 50°F (10°C)

Viscosity: Not Determined

Refractive Index: Not Determined

Surface Tension: Not Determined

% Volatile: Not Determined

Evaporation Rate(BuAc=1): Not Determined

Section 10 - Stability and Reactivity

Stability: KB3208 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 KB3208 can produce carbon monoxide, carbon dioxide, and unidentified organic compounds.

Section 11 – Toxicological Information**Toxicity Data:***

Eye Effects: Vapors cause eye irritation.
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_{Lo}: Data not available
 Rat, LC₅₀(toluene): 4000 mg/kg
Acute Oral Effects:
 Rat, oral, LD₅₀(toluene): 5000 mg/kg
Chronic Effects: Data not available.
Carcinogenicity: Not Classifiable as to Human Carcinogenicity
Mutagenicity: Data not available
Teratogenicity: Data not available.

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

Section 12 – Ecological Information

Ecotoxicity: Data not available.
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 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 toluene)	Packaging Authorizations	Quantity Limitations
Shipping Symbols: N/A	a) Exceptions: 173.150	a) Passenger, Aircraft, or Railcar: 60L
Hazard Class: 3	b) Non-bulk Packaging: 173.203	b) Cargo Aircraft Only: 220L
ID No.: UN1993	c) Bulk Packaging: 173.242	Vessel Stowage Requirements
Packing Group: III		a) Vessel Stowage: A
Label: 3, Flammable Liquid		b) Other: None
Special Provisions (172.102): 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): U220 (contains toluene)
 RCRA Hazardous Waste Classification (40 CFR 261): Ignitable (contains toluene)
 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): Toluene, 1000 lbs.
 SARA 311/312 (40 CFR 370) Codes: Acute Health, Chronic Health, Fire Hazard (1,3,4) [contains toluene]
 SARA 313 Toxic Chemical (40 CFR 372.65): Listed effective 1/1/87 (toluene)
 SARA 304 EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed

OSHA Regulations:

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

California Proposition 65 ingredients:

Toluene

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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