

**Section 1 - Chemical Product and Company Identification**

**Product/Chemical Name:** KMCO 77XF  
**Chemical Formula:** Mixture  
**CAS Number:** Mixture  
**Synonyms:** Cement Clinker Grinding Compound Liquid  
**General Use:** Cement Grinding Aid  
**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 or % vol				
Other Ingredients	TSCA Listed		75				
Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	

**Section 3 - Hazards Identification**

☆☆☆☆☆ **Emergency Overview** ☆☆☆☆☆

WARNING! LIQUID MAY BE IRRITATING TO SKIN AND EYES. CAN CAUSE LIVER AND KIDNEY DAMAGE. MAY CAUSE DIZZINESS AND DROWSINESS.

<b>HMIS</b>	
<b>H</b>	1
<b>F</b>	1
<b>R</b>	0

**Potential Health Effects**

**Acute Effects**

**Inhalation:** May cause irritation of the respiratory system on prolonged exposure.  
**Eye:** May be corrosive to eyes and may cause permanent eye damage.  
**Skin:** May cause skin irritation.  
**Ingestion:** No hazard in normal industrial use. The LD50(rats) indicates that this material is not toxic by OSHA definition.  
**Carcinogenicity:** Not listed as a carcinogen.  
**Medical Conditions Aggravated by Long-Term Exposure:** May aggravate an existing dermatitis, throat, or respiratory condition.  
**Chronic Effects:** None known.

**Section 4 - First Aid Measures**

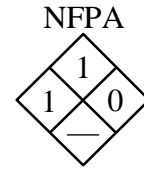
**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.  
**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.  
**Skin Contact:** Remove any contaminated clothing. Wash skin with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists. Wash clothing before reuse.  
**Ingestion:** Do not induce vomiting. Get immediate medical attention.

*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.

**Section 5 - Fire-Fighting Measures**

**Flash Point:** Not Determined  
**Flash Point Method:** N/A  
**Burning Rate:** Not Determined  
**Autoignition Temperature:** Not Determined  
**LEL:** Not Determined  
**UEL:** Not Determined  
**Flammability Classification:** Dangerous when exposed to heat or flames.  
**Extinguishing Media:** Water fog, foam, dry chemical, carbon dioxide.  
**Unusual Fire or Explosion Hazards:** None known.  
**Hazardous Combustion Products:** Carbon monoxide, carbon dioxide, 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 an 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).

**Section 7 - Handling and Storage**

**Handling Precautions:** Avoid contact with eyes and skin. Avoid breathing mists or vapors.  
**Storage Requirements:** Keep away from oxidizing agents, ignition sources, combustible materials, and heat. For bulk storage, use carbon steel or stainless steel tanks.  
**Regulatory Requirements:** : This product contains the following chemical(s) subject to the reporting requirements of SARA Title III Section 311, 312, and 313: None.

**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

<b>Physical State:</b> Liquid	<b>Water Solubility:</b> Soluble
<b>Appearance and Odor:</b> Dark amber liquid with an amine like odor	<b>Other Solubilities:</b> Not Determined
<b>Odor Threshold:</b> Not Determined	<b>Boiling Point:</b> Not Determined
<b>Vapor Pressure:</b> Not Determined	<b>Freezing/Melting Point:</b> Not Determined
<b>Vapor Density (Air=1):</b> >1	<b>Viscosity:</b> Not Determined
<b>Formula Weight:</b> Not Applicable	<b>Refractive Index:</b> Not Determined
<b>Density:</b> 9.83lb/gal	<b>Surface Tension:</b> Not Determined
<b>Specific Gravity (H<sub>2</sub>O=1, at 4 °C):</b> 1.15	<b>% Volatile:</b> No Determined
<b>pH:</b> 6.5 – 8.5	<b>Evaporation Rate(BuAc=1):</b> <1.0

### Section 10 - Stability and Reactivity

**Stability:** KMCO 77XF is stable at room temperature in closed containers under normal storage and handling conditions.

**Polymerization:** Hazardous polymerization can occur.

**Chemical Incompatibilities:** Strong oxidizing agents.

**Conditions to Avoid:** Excessive heat, ignition sources, and strong oxidizing agents.

**Hazardous Decomposition Products:** Thermal oxidative decomposition of KMCO 77 can produce carbon monoxide, carbon dioxide, and unidentified organic compounds.

### Section 11- Toxicological Information

	<b>Toxicity Data: *</b>
<b>Eye Effects:</b> Not established.	<b>Acute Inhalation Effects:</b> Human, inhalation, TC <sub>LO</sub> : Data not available
<b>Skin Effects:</b> Not a primary skin irritant (rabbit),	<b>Acute Oral Effects:</b> Rat, oral, LD <sub>50</sub> : >1500 mg/kg
<b>Inhalation:</b> Not established.	<b>Chronic Effects:</b> Data not available.
<b>Ingestion:</b> >15g/kg (rats)	<b>Carcinogenicity:</b> Not a listed carcinogen.
	<b>Mutagenicity:</b> Data not available.
	<b>Teratogenicity:</b> 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

**Disposal:** Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.

**Disposal Regulatory Requirements:** Contact your supplier or a licensed contractor for detailed recommendations.

**Container Cleaning and Disposal:** Dispose of container and unused contents in accordance with Federal, state, and local requirements.

**Section 14 - Transport Information****DOT Transportation Data (49 CFR 172.101):**

**Shipping Name:** Cement  
Clinker Grinding Compound  
Liquor

**Shipping Symbols:** N/A

**Hazard Class:** Not regulated  
by the DOT as a hazardous  
material.

**ID No.:** N/A

**Packing Group:** N/A

**Label:** N/A

**Special Provisions  
(172.102):** N/A

**Packaging Authorizations**

**a) Exceptions:** N/A

**b) Non-bulk Packaging:**  
N/A

**c) Bulk Packaging:** N/A

**Quantity Limitations**

**a) Passenger, Aircraft, or Railcar:** no  
limit

**b) Cargo Aircraft Only:** no limit

**Vessel Stowage Requirements**

**a) Vessel Stowage:** none

**b) Other:** none

**Section 15 - Regulatory Information****EPA Regulations:**

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)

RCRA Hazardous Waste Classification (40 CFR 261): Not classified

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

CERCLA Reportable Quantity (RQ), none

SARA 311/312 Codes: Ethylene glycol – 0.0 ~ 5.4 % Potential

SARA Toxic Chemical (40 CFR 372.65): Ethylene Glycol (1.0% concentration threshold)

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

**OSHA Regulations:**

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

OSHA Specifically Regulated Substance (29CFR 1910): Not listed.

**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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