



43443 FLINT STREET  
 P.O. BOX 632  
 NOVI, MICHIGAN 48050-0632

**Material Safety Data Sheet**  
 May be used to comply with  
 OSHA's Hazard Communication Standard,  
 29 CFR 1910.1200. Standard must be  
 consulted for specific requirements.

**U.S. Department of Labor**  
 Occupational Safety and Health Administration  
 (Non-Mandatory Form)  
 Form Approved  
 OMB No. 1218-0072



**IDENTITY** (As Used on Label and List) Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

**Section I**

Manufacturer's Name Fendt Transit Mix, Inc.	Emergency Telephone Number (313) 349-0379
Address (Number, Street, City, State, and ZIP Code) 43443 Flint St. Novi, MI 48050	Telephone Number for Information (313) 349-0379
	Date Prepared 6/23/86
	Signature of Preparer (optional)

**Section II — Hazardous Ingredients/Identity Information**

Hazardous Components (Specific Chemical Identity; Common Name(s)) OSHA PEL NA ACGIH TLV NA Other Limits Recommended none% (optional)

Identy Information:  
 Formula-Mixtures of portland or blended cements, concrete agregates and chemical admixtures.

Portland and blended Cements:  
 3CaO-SiO<sub>2</sub> (CAS # 12168-85-3)  
 2CaO-SiO<sub>2</sub> (CAS # 10034-77-2)  
 3CaO-Al<sub>2</sub>O<sub>3</sub> (CAS # 23042-78-3)  
 4CaO-Al<sub>2</sub>O<sub>3</sub>-Fe<sub>2</sub>O<sub>3</sub> (CAS # 12068-35-8)  
 CaSO<sub>4</sub>-2H<sub>2</sub>O (CAS # 7778-18-9)  
 plus traces of CaO, MgO, K<sub>2</sub>SO<sub>4</sub>, and Na<sub>2</sub>SO<sub>4</sub>

Other Ingredients: Concrete Aggregates, Inert gravel, snad and rocks  
 Admixtures, May include fly ash, granulated slag.

**Section III — Physical/Chemical Characteristics**

Boiling Point	NA	Specific Gravity (H <sub>2</sub> O = 1)	NA
Vapor Pressure (mm Hg.)	NA	Melting Point	NA
Vapor Density (AIR = 1)	NA	Evaporation Rate (Butyl Acetate = 1)	NA
Solubility in Water Slight (0.01 to 1%)			
Appearance and Odor Gray, plastic, flowable, granular mud and odorless			

**Section IV — Fire and Explosion Hazard Data**

Flash Point (Method Used)	NA	Flammable Limits	NA	LEL	NA	UEL	NA
Extinguishing Media	NA						
Special Fire Fighting Procedures	NA						
Unusual Fire and Explosion Hazards	None						

(Reproduce locally)

OSHA 174, Sept. 1985

**Section V — Reactivity Data**

Stability	Unstable		Conditions to Avoid
	Stable	x	However, product stiffens and hardens in 2 to 8 hours

Incompatibility (Materials to Avoid) None

Hazardous Decomposition or Byproducts None

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	x	

**Section VI — Health Hazard Data**

Route(s) of Entry: Inhalation? No Skin? Yes Ingestion? No

Health Hazards (Acute and Chronic) Acute- Wet plastic, unhardened concrete, can dry skin and cause alkali burns (cement dermatitis). Chronic-Hypersensitive individuals may develop an allergic dermatitis. Cement may contain trace amounts of chromium.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

Signs and Symptoms of Exposure Irritation of skin and burning sensation particularly when exposure is in an area of skin previously subjected to abrasion or irritation.

Medical Conditions Generally Aggravated by Exposure None Known

Emergency and First Aid Procedures Irrigate eyes with water, wash exposed areas of the body with soap and water.

**Section VII — Precautions for Safe Handling and Use**

Steps to Be Taken in Case Material Is Released or Spilled Spill does not increase hazard

Waste Disposal Method Material can be retained until it hardens when it can be disposed of as common waste.

Precautions to Be Taken in Handling and Storing Use barrier creams, gloves, boots and clothing to protect the skin from prolonged contact with plastic concrete. Particularly avoid abrasion of the skin in contact with unhardened plastic concrete. Precautions must be observed because cement burns occur with little warning—little heat is sensed. Eye protection is not generally required.

**Section VIII — Control Measures**

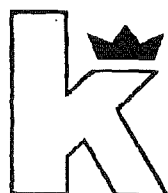
Respiratory Protection (Specify Type) Not required

Ventilation	Local Exhaust	None	Special	None
	Mechanical (General)	None	Other	None

Protective Gloves See VII Eye Protection See VII

Other Protective Clothing or Equipment See VII

Work/Hygienic Practices See VII



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# KOENIG FUEL & SUPPLY CO.

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(313) 368-1870

KOENIG FUEL & SUPPLY CO

## M A T E R I A L   S A F E T Y   D A T A   S H E E T

### SECTION I

PRODUCT NAME: FRESHLY MIXED UNHARDENED CONCRETE  
 MANUFACTURER'S NAME: Koenig Fuel & Supply  
 ADDRESS: 500 East 7 Mile Road, Detroit, Michigan 48203  
 1470 Atwater Street, Detroit, Michigan 48207  
 23940 Plymouth Road, Redford Twp, Michigan 48237  
 TELEPHONE: (313) 368-1870  
 ISSUE DATE: May 1995

### INGREDIENTS:

Formula -- Mixtures of portland or blended cements, concrete aggregates and chemical admixtures.

#### Portland and Blended Cements:

3CaO . SiO <sub>2</sub>	{ CAS # 12168-85-3 }
2CaO . SiO <sub>2</sub>	{ CAS # 10034-77-2 }
3CaO . Al <sub>2</sub> O <sub>3</sub>	{ CAS # 23042-78-3 }
4CaO . Al <sub>2</sub> O <sub>3</sub> . Fe <sub>2</sub> O <sub>3</sub>	{ CAS # 12086-35-8 }
CaSO <sub>4</sub> . 2H <sub>2</sub> O	{ CAS # 7778-18-9 }

plus traces of CaO, MgO, K<sub>2</sub>SO<sub>4</sub>, and Na<sub>2</sub>SO<sub>4</sub>

#### Other Ingredients:

Concrete Aggregates: Inert gravel, sand and rocks  
 Admixtures: May include fly ash, granulated slag and very small amounts of organic and inorganic materials which have no effect on the hazards associated with the use of the product.

### SECTION II - HAZARDOUS INGREDIENTS

NONE

### SECTION III - PHYSICAL DATA

Boiling Point:	Not Applicable	Specific Gravity:	Not Applicable
Vapor Pressure:	Not Applicable	Melting Point:	Not Applicable
Vapor Density:	Not Applicable	Evaporation Rate:	Not Applicable
Solubility in Water:	Slight (0.01 to 1%)		
Appearance and Odor:	Gray, plastic, flowable, granular mud and odorless		

### SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point:	Not Applicable
Flammable Limits:	Not Applicable
Extinguishing Media:	Not Applicable
Special Fire Fighting Procedures:	Not Applicable
Unusual Fire and Explosion Hazards:	None

(Continued on Reverse Side)

SECTION V - REACTIVITY DATA

Stability: Stable. However, product stiffens and hardens in 2 to 8 hours and is no longer hazardous.

Conditions to Avoid: None

Incompatibility: None

Hazardous Decomposition Products: None

Hazardous Polymerization: Will Not Occur

SECTION VI - HEALTH HAZARD DATA

Routes of Entry: Inhalation? No      Skin? Yes      Ingestion? No

Effects of overexposure:

Acute: Wet plastic, unhardened concrete can dry the skin and cause alkali burns (cement dermatitis).

Chronic: Hypersensitive individuals may develop an allergic dermatitis. Cement may contain trace amounts of chromium.

Carcinogenicity: NTP? No      IARC Monographs? No      OSHA Regulated? No

Signs and Symptoms of Exposure: Irritation of skin and burning sensation particularly when exposure in an area of skin previously subjected to abrasion or irritation.

Medical Conditions Generally Aggravated by Exposure: None known

Emergency and First-aid Procedures: Irrigate eyes with water. Wash exposed areas of the body with soap and water.

SECTION VII - SPILL AND DISPOSAL INFORMATION

Steps to be Taken in Case Material is Spilled: Spill does not increase hazard.

Waste Disposal Method: Material can be retained until it hardens when it can be disposed of as common waste.

SECTION VIII - SPECIAL PROTECTION INFORMATION

Respiratory protection: Not required

Ventilation: Not applicable

Eye Protection: Not generally required. Tight-fitting goggles should be used when placing methods cause splashing.

Skin Protection: Use barrier creams, gloves, boots and clothing to protect the skin from prolonged contact with wet, plastic concrete. Particularly avoid abrasion of the skin in contact with unhardened concrete. Precautions must be observed because cement burns occur with little warning -- little heat is sensed.

SECTION IX - PRECAUTIONARY LABEL

CAUTION: Freshly mixed cement, mortar, grout or concrete may cause skin irritation. Avoid direct contact where possible and wash exposed skin areas promptly with water. If any cementitious material gets into the eye, rinse immediately and repeatedly with water and get prompt medical attention.

SECTION X - DOCUMENTARY INFORMATION

The above information in this document is believed to be correct as of the date hereof. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THIS INFORMATION, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE.

This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.



# SUPERIOR Redi-Mix, Inc.

DATE 3/16/98

TO LAUNORN ELECTRIC, INC.

ATTENTION CLIFFORD T. WIERZENSKI

FAX NO 810-789-8223

FROM Kenneth G. Woloszyk

RETURN FAX NO 248-852-1353

This transmittal includes 2 sheets including this cover sheet.

COMMENTS:

*MSDS SHEET FOR REDDY-MIX CONCRETE.*

**\*\*\*MATERIAL SAFETY DATA SHEET\*\*\***

MANUFACTURER—GF  
MSDS PREPARED BY

SIGNATURE—

PREPARATION DATE - August 27, 1990 PRODUCT NAME - READY MIX CONCRETE

**SECTION I—HAZARDOUS COMPONENTS**

INGREDIENTS	ACGIH TLV	OSHA PEL
Portland Cement*	10 mg/m <sup>3</sup> (total dust)	50 mppcl
Sand or stone	—	—

\*Ready Mix Concrete is delivered as a water mixture in a semi-liquid state. The exposure limits refer to dry powdered cement dust and are not applicable to this product. Mix designs may dictate the use of admixtures. Admixture quantities vary from 0.01% to 1.7% of the concrete. See appendix for information about admixtures that may have been added to your order.

**SECTION II—PHYSICAL DATA**

BOILING POINT—N/D VAPOR PRESSURE—N/D VAPOR DENSITY (Air = 1)—N/D SOLUBILITY IN WATER—Uncured cement is dispersible in water. APPEARANCE AND ODOR—Grey viscous fluid, mild odor. SPECIFIC GRAVITY (H<sub>2</sub>O = 1)—N/D MELTING POINT—N/A EVAP. RATE (Ether = 1)—N/D

**SECTION III—FIRE AND EXPLOSION HAZARD DATA**

FLASH POINT—Not flammable FLAMMABLE LIMITS—Not flammable EXTINGUISHING MEDIA—None required SPECIAL FIRE FIGHTING PROCEDURES—None required UNUSUAL FIRE AND EXPLOSION HAZARDS—None

**SECTION IV—REACTIVITY DATA**

STABILITY—Stable CONDITIONS TO AVOID—None known INCOMPATIBILITY (Materials to avoid)—Strong acids HAZARDOUS DECOMPOSITION PRODUCTS—None known HAZARDOUS POLYMERIZATION—Will not occur

**SECTION V—HEALTH HAZARD DATA**

ROUTES OF ENTRY—Skin or eye contact

HEALTH HAZARDS (ACUTE)—Contact with uncured Ready Mix Concrete can injure the eye. A splash in the eye can cause smarting and a burning sensation and may induce corneal edema (the victim may immediately see colored rings or haloes around lights).

Ready Mix Concrete in the plastic state can irritate the skin and may cause alkali burns. Repeated or prolonged contact may cause dermatitis. A few persons may develop an allergic dermatitis following contact with this product.

HEALTH HAZARDS (CHRONIC)—The crystalline silica content of this product may be greater than 1%. Inhaled silica can damage the lungs and is considered to be an animal carcinogen by IARC. Since silica is in a non-respirable form in Ready Mix Concrete, the risk of silica inhalation is negligible and it should not present a significant health hazard.

**SECTION VI—EMERGENCY AND FIRST AID PROCEDURES**

EYE CONTACT—Immediately rinse with copious amounts of water for 15 minutes, occasionally lifting upper and lower lids. Obtain medical attention immediately.

SKIN CONTACT—Wash contaminated skin promptly with soap and water. Immediately flush with copious amounts of water any Ready Mix Concrete that comes in contact with the skin or clothing where the saturated clothing may contact the skin. Saturated or contaminated clothing should be removed and washed before re-use. Obtain medical attention if irritation persists.

INHALATION—Remove to fresh air. Administer oxygen or artificial respiration, if necessary. Obtain medical attention immediately.

**SECTION VII—PRECAUTIONS FOR SAFE HANDLING AND USE**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED—Contain spilled material and do not allow to flow into public sewers or water systems. Allow material to harden and transfer into containers for proper disposal.

WASTE DISPOSAL METHOD—Landfill waste materials at approved sites. Dispose in accordance with Federal, State, and Local regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE—Avoid skin and eye contact. Do not wear contact lenses while working with this material. Wash contaminated clothes before re-use.

**SECTION VIII—CONTROL MEASURES**

RESPIRATORY PROTECTION—Recommended when working in enclosed areas. A NIOSH/MSHA-approved respirator is required if a TLV is exceeded. VENTILATION—Use in well-ventilated areas. PROTECTIVE GLOVES—Impervious gloves recommended. EYE PROTECTION—Chemical Safety goggles or full face mask. SKIN PROTECTION—Chemical resistant apron. Loose clothing, with the neck closed and sleeves rolled down. Safety shoes should be laced so that no openings are left through which concrete may reach the skin. OTHER PROTECTIVE CLOTHING OR EQUIPMENT—Safety shower and eye wash station.

**SECTION IX—APPENDIX**

One or more admixtures may be added to Ready Mix Concrete to produce specific properties. None of the admixtures alter the acute health effects that may result from exposure to Ready Mix Concrete. Some of the admixtures contain minute or trace quantities of potential or suspect carcinogens. Please compare the Table below with your purchase order or delivery ticket to determine whether any may be present in the product delivered to you.

ADMIXTURE	HAZARDOUS CONTAMINANT	PERCENT OF TOTAL	ADMIXTURE	HAZARDOUS CONTAMINANT	PERCENT OF TOTAL
DARACCEL	Ethylene oxide	Traces	DAREX AEA	Ethylene oxide	less than 1 ppt
DARACEL 100	Formaldehyde	0.002-0.003%	MIGHTY 150	Formaldehyde	0.0003-0.0004%
DARASET	Nitrosodimethanolamine	Traces	WRDA-19	Formaldehyde	less than 0.0003%
DARATARC-17	Formaldehyde	0.005-0.008%	WRDA-HYCOL	Formaldehyde	less than 0.001%
DAREX AEA	Dimethoxane	less than 0.0001%			

**TRACE CONTAMINANTS—EXPOSURE LIMITS**

Ingredient	CAS NO.	ACGIH TLV	OSHA PEL	OSHA STEL (15 min)
Dimethoxane	828-002-2	— Not established —	—	—
Ethylene oxide	75-21-8	1 ppm	1 ppm	—
Formaldehyde	50-00-0	1 ppm	1 ppm	2 ppm
Nitrosodimethanolamine	1116-54-7	— Not established —	—	—

**SECTION X—DISCLAIMER**

THE INFORMATION IN THIS MSDS WAS OBTAINED FROM SOURCES BELIEVED TO BE RELIABLE. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, REGARDING ITS ACCURACY OR CORRECTNESS. THE CONDITIONS OR METHODS OF HANDLING, STORAGE, USE AND DISPOSAL OF THE PRODUCT ARE BEYOND OUR CONTROL AND MAY BE BEYOND OUR KNOWLEDGE. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.

\* = Not applicable N/D = Not determined