

# SAFETY DATA SHEET

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Process Time: 10:21 am

Date Revised: 3/5/13

Date Printed: 4/8/15

===== SECTION 1 - IDENTIFICATION =====

MANUFACTURER: SIERRA CORP/TK PRODUCTS      EMERGENCY PHONE: 1-800-424-9300  
ADDRESS : 11400 WEST 47TH STREET      INFORMATION PHONE: (952)938-7223  
MINNETONKA, MN 55343      NAME OF PREPARER : Safety Director

PRODUCT NAME: EPO 2000, PART A  
PRODUCT CODE: TK-EPO 2000 A

===== SECTION 2 - HAZARDS IDENTIFICATION =====

HAZARD RISK CLASSIFICATION

SIGNAL WORD: DANGER

PICTOGRAM:

GHS07 - EXCLAMATION MARK    GHS09 - ENVIRONMENT

HAZARD CLASS

HAZARD CATEGORY

ACUTE TOXICITY	CATEGORY 4 INHALATION
SKIN CORROSION / IRRITATION	CATEGORY 2
SERIOUS EYE DAMAGE / EYE IRRITATION	CATEGORY 2 AND 2A
SKIN SENSITIZER	CATEGORY 1
TOXIC TO SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	CATEGORY 3
HAZARDOUS TO THE AQUATIC ENVIRONMENT LONG-TERM (CHRONIC)	CHRONIC 2

HAZARD STATEMENTS:

H303      May be harmful if swallowed  
H315      Causes skin irritation  
H317      May cause allergic skin reaction  
H319      Causes serious eye irritation.  
H332      Harmful if inhaled  
H335      May cause respiratory irritation  
H411      Toxic to aquatic life with long lasting effects

PRECAUTIONARY STATEMENTS:

PREVENTION:

P261      Avoid breathing dust/fume/gas/mist/vapor/ spray.  
P264      Wash hands and any exposed area thoroughly after handling.  
P271      Use only outdoors or in well-ventilated area.  
P272      Contaminated work clothing should not be allowed out of the  
workplace.  
P280      Wear protective impervious gloves/ OSHA approved eye  
protection/face protection.

RESPONSE:

P301+P312      If swallowed: Call a Poison Center / doctor if you feel unwell.  
P302+P352      If on skin: Wash with plenty of water.  
P304+P340      If inhaled: Remove person to fresh air and keep comfortable for  
breathing.  
P305+P351+P338      If in eyes: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
P312      Call a POISON CENTER/doctor if you feel unwell.  
P321      Specific treatment (see on this label)  
P330      Rinse mouth.

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P332+P313 If skin irritation occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P363 Wash contaminated clothing before reuse.

**STORAGE:**

P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.

**DISPOSAL:**

P501 Store separately. Dispose of contents/ container in accordance with local/ regional/national /international regulations.

**SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS**

COMPONENT	CAS NUMBER	WEIGHT PERCENT	EXPOSURE LIMITS		
			OSHA PEL	ACGIH TLV	OTHER
Epichlorhydrin copolymer	25085-99-8	75-90			NOT ESTABLISHED
Titanium Dioxide	13463-67-7	10-25	10 mg/m3	10 mg/m3	

**PRIMARY ROUTES OF EXPOSURE:**

Skin contact.

**EFFECTS OF ACUTE EXPOSURE:**

**EYES:** Direct contact with eyes may cause irritation.

**SKIN:** Prolonged or repeated contact may cause irritation.  
**INHALATION:** Inhalation of vapor or mist can cause irritation of nose, throat and lungs and lead to headaches and nausea.

**INGESTION:** Not an anticipated route of exposure. Small amounts are not expected to be harmful.

**CHRONIC HEALTH EFFECTS:**

No anticipated chronic effects.MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

No known effects on other illnesses.

**SECTION 4 - FIRST AID MEASURES**

**EYES:** Flush with large amounts of water for 15 minutes, lifting upper and lower eyelids. If irritation persists seek medical attention.

**SKIN CONTACT:** Wash contaminated area with soap and water. Remove and launder contaminated clothing.

**INGESTION:** If a large amount is ingested, give water or milk and induce vomiting. Seek medical attention.

**INHALATION:** Remove victim to fresh air and provide oxygen if breathing is difficult. If breathing has stopped administer artificial respiration. Seek medical attention if condition persists.

**SECTION 5 - FIRE AND EXPLOSION HAZARD DATA**

**FLASH POINT:** No flash

**METHOD USED:** PMCC

**FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER:** n/a

**UPPER:** n/a

**EXTINGUISHING MEDIA:**

This material will not burn in its liquid state unless heated above its flash point. Dried films may burn and can be extinguished by water spray, foam, dry chemical or carbon dioxide.

**SPECIAL FIREFIGHTING PROCEDURES:**

Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment. Isolate danger area, keep unauthorized personnel out.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

There is the possibility of pressure buildup in closed containers when heated. Water spray may be used to cool these containers.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

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## STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Do not let uncured spilled or leaking material enter watercourse. May be toxic to aquatic life. Absorb with oil-dri or similar inert material. Sweep or scrape up and containerize. Rinse affected area thoroughly with water. Wear appropriate protective equipment.

## SECTION 7 - HANDLING AND STORAGE

### HANDLING INFORMATION:

Employees who come in contact with this material must be trained in accordance to 1910.1200 of the Hazard Communication Standard. Wear chemical resistant gloves and protective clothing to minimize contact. The use of respiratory protection is advised when spraying because of mist and dust overspray.

### STORAGE INFORMATION:

Keep from freezing; material may coagulate. The minimum recommended storage temperature is 34F/1C, the maximum recommended storage temperature is 120F/49C. Keep away from incompatible materials (see section 10). Keep containers tightly closed. It is advised that material be used within 1 year of manufacture, rotate stock.

### OTHER PRECAUTIONS:

All empty containers should be disposed of in an environmentally safe manner in accordance with all governmental regulations.

## SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### RESPIRATORY PROTECTION:

No special requirements under normal use conditions. In confined areas, or areas with poor ventilation, engineering controls should be used to minimize exposure. Use NIOSH/MSHA approved respirator if conditions warrant.

### VENTILATION:

General room ventilation is adequate.

### PROTECTIVE GLOVES:

Prevent prolonged or repeated contact by wearing chemical resistant gloves and other appropriate protective clothing. Launder contaminated clothing before reuse.

### EYE PROTECTION:

Wear safety glasses to reduce eye contact potential. Chemical safety goggles (ANSI Z87.1 or approved equivalent) are appropriate if splashing is likely. Eye washes must be available where eye contact can occur.

### OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

A source of clean water should be available for flushing eyes and skin. Showers should be available if larger spills are possible.

### WORK/HYGIENIC PRACTICES:

Efforts should be made to minimize contact and spills. Always wash hands before eating, drinking, or smoking. Clean up spills promptly. Follow OSHA and company guidelines.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

COLOR: Various colors

ODOR: Amine or ammonia odor

SOLUBILITY IN WATER: Dilutable

SPECIFIC GRAVITY (H2O=1): 1.3

VAPOR DENSITY: Heavier than air.

BOILING RANGE:

EVAPORATION RATE: Slower than nBuAc

COATING V.O.C.: 0 g/l (0.0 lb/gal)

## SECTION 10 - STABILITY AND REACTIVITY DATA

### STABILITY:

Stable under normal conditions and handling.

### CONDITIONS TO AVOID:

None known

### INCOMPATIBILITY (MATERIALS TO AVOID):

None known. Materials which are not compatible with water or ordinary organics will not be compatible with this material.

### HAZARDOUS DECOMPOSITION OR BYPRODUCTS:

Combustion may liberate toxic byproducts such as carbon dioxide, and carbon monoxide, various oxides of carbon and nitrogen. Thermal decomposition may liberate acrylic monomers and ammonia.

### HAZARDOUS POLYMERIZATION:

Will not occur.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### SENSITIZATION:

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None known.

## CARCINOGENICITY:

There is no data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.

## REPRODUCTIVE TOXICITY:

There is no data available to indicate any components present at greater than 0.1% may present reproductive toxicity.

## TERATOGENICITY (BIRTH DEFECTS):

There is no data available to indicate any components present at greater than 0.1% may cause birth defects.

## MUTAGENICITY:

There is no data to indicate that any component present at greater than 0.1% will alter DNA.

## SECTION 12 - ECOLOGICAL INFORMATION

### ENVIRONMENTAL DATA:

Contains ammonia or amines which may be toxic to aquatic life.

## SECTION 13 - DISPOSAL CONSIDERATIONS

This product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261, however, state and local regulations may be more restrictive. Coagulate the emulsion by the stepwise addition of ferric chloride and lime. Remove the clear supernatant and flush to a chemical sewer. Incinerate liquid and contaminated solids in accordance with local, state, and federal regulations.

## SECTION 14 - TRANSPORT INFORMATION

### SHIPPING NAME:

Not regulated.

## SECTION 15 - REGULATORY INFORMATION

All ingredients of this product are listed, or are excluded from listing, on the US Toxic Substances Control Act (TSCA) chemical substance inventory.

This product does not contain a chemical subject to the reporting requirements of SARA Title III, Section 313 (40CFR 372) above de minimis concentrations.

### STATE SPECIFIC REQUIREMENTS:

This product does not contain a chemical known to the state of California to cause cancer, birth defects or reproductive harm, subject to the requirements of California Proposition 65.

STATE LISTED COMPONENTS	CAS NUMBER	STATE CODE	.
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## SECTION 16 - OTHER INFORMATION

REVISION DATE: 03/05/13

HMIS CODES: H	F	R	P
2	1	0	B

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===== SECTION 1 - IDENTIFICATION =====

MANUFACTURER: SIERRA CORP/TK PRODUCTS            EMERGENCY PHONE: 1-800-424-9300  
ADDRESS : 11400 WEST 47TH STREET            INFORMATION PHONE: (952)938-7223  
          MINNETONKA, MN 55343            NAME OF PREPARER : Safety Director

PRODUCT NAME: EPO 2000, PART B  
PRODUCT CODE: TK-EPO 2000 B

===== SECTION 2 - HAZARDS IDENTIFICATION =====

HAZARD RISK CLASSIFICATION

SIGNAL WORD: DANGER

PICTOGRAM:

GHS05 - CORROSION    GHS06 - SKULL AND CROSSBONES

HAZARD CLASS	HAZARD CATEGORY
ACUTE TOXICITY	CATEGORY 3    DERMAL
SKIN CORROSION / IRRITATION	CATEGORY 1
SKIN SENSITIZER	CATEGORY 1
HAZARDOUS TO THE AQUATIC ENVIRONMENT LONG-TERM (CHRONIC)	CHRONIC 3

HAZARD STATEMENTS:

H303            May be harmful if swallowed  
H311            Toxic in contact with skin  
H314            Causes severe skin burns and eye damage  
H317            May cause allergic skin reaction  
H412            Harmful to aquatic life with long lasting effects

PRECAUTIONARY STATEMENTS:

PREVENTION:

P260            Do not breath dusts/fume/gas/mist/vapors or spray.  
P264            Wash hands and any exposed area thoroughly after handling.  
P272            Contaminated work clothing should not be allowed out of the  
workplace.  
P280            Wear protective impervious gloves/ OSHA approved eye  
protection/face protection.

RESPONSE:

P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated  
clothing. Rinse skin with water (or shower).  
P304+P340            If inhaled: Remove person to fresh air and keep comfortable for  
breathing.  
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
P310            Immediately call a POISON CENTER/doctor/ emergency responder.  
P312            Call a POISON CENTER/doctor if you feel unwell.  
P321            Specific treatment (see on this label)  
P322            Specific measures (see on this label)  
P333+P313            If skin irritation or rash occurs: Get medical advice/attention.  
P361+P363            Take off immediately all contaminated clothing and wash before  
reuse.  
P363            Wash contaminated clothing before reuse.

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## STORAGE:

P405 Store locked up.

## DISPOSAL:

P501 Store separately. Dispose of contents/ container in accordance with local/ regional/national /international regulations.

## SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS NUMBER	WEIGHT	EXPOSURE LIMITS		
		PERCENT	OSHA PEL	ACGIH TLV	OTHER
* 1,2-Ethanediamine, N,N'-bis-(2-Aminoethyl)-112-24-3		25-50			NOT ESTABLISHED
* Polyethylenepolyamine Adduct	68953-36-6	25-50			NOT ESTABLISHED

\* Chemical(s) that are chronic health hazards. Refer to section 3 for further information.

## PRIMARY ROUTES OF EXPOSURE:

Skin contact.

## EFFECTS OF ACUTE EXPOSURE:

**EYES:** Corrosive to eyes. Contact with eyes may cause severe irritation and burns.

**SKIN:** Corrosive to skin and mucous membranes. Contact with skin may cause severe irritation and burns. May be absorbed through skin in toxic amounts.

**INHALATION:** Inhalation of vapor or mist can cause irritation of nose, throat and lungs and lead to headaches and nausea.

**INGESTION:** Not an anticipated route of exposure. Small amounts are not expected to be harmful. Can cause gastrointestinal irritation, nausea, vomiting and diarrhea. Small amounts aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury.

## CHRONIC HEALTH EFFECTS:

Although some components may indicate chronic exposure effects, no effects are anticipated under normal use conditions due to the relatively low proportion in the total mixture.

## MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

No known effects on other illnesses.

## SECTION 4 - FIRST AID MEASURES

**EYES:** Flush with large amounts of water for 15 minutes, lifting upper and lower eyelids. If irritation persists seek medical attention.

**SKIN CONTACT:** Wash contaminated area with soap and water. Remove and launder contaminated clothing.

**INGESTION:** If a large amount is ingested, give water or milk and induce vomiting. Seek medical attention.

**INHALATION:** Remove victim to fresh air and provide oxygen if breathing is difficult. If breathing has stopped administer artificial respiration. Seek medical attention if condition persists.

## SECTION 5 - FIRE AND EXPLOSION HAZARD DATA

**FLASH POINT:** Greater than 200 F

**METHOD USED:** PMCC

**FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER:** 1.4

**UPPER:** n/a

## EXTINGUISHING MEDIA:

This material will not burn in its liquid state unless heated above its flash point. Dried films may burn and can be extinguished by water spray, foam, dry chemical or carbon dioxide.

## SPECIAL FIREFIGHTING PROCEDURES:

Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment. Isolate danger area, keep unauthorized personnel out.

## UNUSUAL FIRE AND EXPLOSION HAZARDS:

There is the possibility of pressure buildup in closed containers when heated. Water spray may be used to cool these containers.

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## SECTION 6 - ACCIDENTAL RELEASE MEASURES

### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Do not let uncured spilled or leaking material enter watercourse. May be toxic to aquatic life. Absorb with oil-dri or similar inert material. Sweep or scrape up and containerize. Rinse affected area thoroughly with water. Wear appropriate protective equipment.

## SECTION 7 - HANDLING AND STORAGE

### HANDLING INFORMATION:

Employees who come in contact with this material must be trained in accordance to 1910.1200 of the Hazard Communication Standard. Wear chemical resistant gloves and protective clothing to minimize contact. The use of respiratory protection is advised when spraying because of mist and dust overspray.

### STORAGE INFORMATION:

Keep containers tightly closed. Use and store material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Post "No smoking or open flame" sign. Store only in approved containers. Keep away from incompatible materials (see section 10). Protect containers against physical damage. Indoor storage should meet OSHA standards and appropriate fire codes.

### OTHER PRECAUTIONS:

All empty containers should be disposed of in an environmentally safe manner in accordance with all governmental regulations.

## SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### RESPIRATORY PROTECTION:

No special requirements under normal use conditions. In confined areas, or areas with poor ventilation, engineering controls should be used to minimize exposure. Use NIOSH/MSHA approved respirator if conditions warrant.

### VENTILATION:

General room ventilation is adequate.

### PROTECTIVE GLOVES:

Prevent prolonged or repeated contact by wearing chemical resistant gloves and other appropriate protective clothing. Launder contaminated clothing before reuse.

### EYE PROTECTION:

Wear safety glasses to reduce eye contact potential. Chemical safety goggles (ANSI Z87.1 or approved equivalent) are appropriate if splashing is likely. Eye washes must be available where eye contact can occur.

### OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

A source of clean water should be available for flushing eyes and skin. Showers should be available if larger spills are possible.

### WORK/HYGIENIC PRACTICES:

Efforts should be made to minimize contact and spills. Always wash hands before eating, drinking, or smoking. Clean up spills promptly. Follow OSHA and company guidelines.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

COLOR: Amber/Translucent

ODOR: Amine or ammonia odor

SOLUBILITY IN WATER: Dilutable

SPECIFIC GRAVITY (H<sub>2</sub>O=1): .98

VAPOR DENSITY: Heavier than air.

BOILING RANGE:

EVAPORATION RATE: Slower than nBuAc

COATING V.O.C.: 44 g/l (0.37 lb/gal)

## SECTION 10 - STABILITY AND REACTIVITY DATA

### STABILITY:

Stable under normal conditions and handling.

### CONDITIONS TO AVOID:

None known

### INCOMPATIBILITY (MATERIALS TO AVOID):

Avoid exposure to strong oxidizing agents and reducing agents.

### HAZARDOUS DECOMPOSITION OR BYPRODUCTS:

Combustion may liberate toxic byproducts such as carbon dioxide, and carbon monoxide, various oxides of carbon and nitrogen. Thermal decomposition may liberate acrylic monomers and ammonia.

### HAZARDOUS POLYMERIZATION:

Will not occur.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### SENSITIZATION:

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None known.

## CARCINOGENICITY:

There is no data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.

## REPRODUCTIVE TOXICITY:

There is no data available to indicate any components present at greater than 0.1% may present reproductive toxicity.

## TERATOGENICITY (BIRTH DEFECTS):

Triethylenetetramine is fetotoxic and teratogenetic when fed to laboratory animals.

## MUTAGENICITY:

Triethylenetetramine has been found to be a direct acting mutagen in the ames assay.

## =====**SECTION 12 - ECOLOGICAL INFORMATION**=====

### ENVIRONMENTAL DATA:

Contains ammonia or amines which may be toxic to aquatic life.

## =====**SECTION 13 - DISPOSAL CONSIDERATIONS**=====

This product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261, however, state and local regulations may be more restrictive. Coagulate the emulsion by the stepwise addition of ferric chloride and lime. Remove the clear supernatant and flush to a chemical sewer. Incinerate liquid and contaminated solids in accordance with local, state, and federal regulations.

## =====**SECTION 14 - TRANSPORT INFORMATION**=====

### SHIPPING NAME:

UN1760, Corrosive Liquids, N.O.S., (Triethylenetetramine),8,III

## =====**SECTION 15 - REGULATORY INFORMATION**=====

All ingredients of this product are listed, or are excluded from listing, on the US Toxic Substances Control Act (TSCA) chemical substance inventory.

This product does not contain a chemical subject to the reporting requirements of SARA Title III, Section 313 (40CFR 372) above de minimis concentrations.

### STATE SPECIFIC REQUIREMENTS:

This product contains a chemical(s) known to the state of California to cause cancer, birth defects or reproductive harm, which are subject to the requirements of California Proposition 65.

STATE LISTED COMPONENTS	CAS NUMBER	STATE CODE
Triethylenetetramine	112-24-3	CA, FL, MA, PA, NJ

## =====**SECTION 16 - OTHER INFORMATION**=====

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2	1	0	B