SAFETY DATA SHEET

Date Revised: 8/19/14 **Date Printed:** 4/1/15

========== 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: TK POLYASPARTIC, PART B
PRODUCT CODE: TK-2425 B

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

HAZARD RISK CLASSIFICATION
SIGNAL WORD: DANGER
PICTOGRAM:
GHS02 - FLAME GHS05 - CORROSION GHS06 - SKULL AND CROSSBONES GHS07 - EXCLAMATION MARK GHS08 - HEALTH HAZARD GHS09 - ENVIRONMENT

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE LIQUIDS	CATEGORY 3
ACUTE TOXICITY	CATEGORY 1 INHALATION
ACUTE TOXICITY	CATEGORY 4 DERMAL
ACUTE TOXICITY	CATEGORY 5 ORAL
SKIN CORROSION / IRRITATION	CATEGORY 1
SERIOUS EYE DAMAGE / EYE IRRITATION	CATEGORY 1
RESPIRATORY SENSITIZER	CATEGORY 1
SKIN SENSITIZER	CATEGORY 1
GERM CELL MUTAGENICITY	CATEGORY 1 (BOTH 1A AND 1B)
CARCINOGENICITY	CATEGORY 1 (BOTH 1A AND 1B)
TOXIC TO SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	CATEGORY 3
TOXIC TO SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	CATEGORY 2
ASPIRATION HAZARD	CATEGORY 1
HAZARDOUS TO THE AQUATIC ENVIRONMENT SHORT-TERM (ACUTE)	ACUTE 3
HAZARDOUS TO THE AQUATIC ENVIRONMENT LONG-TERM (CHRONIC)	CHRONIC 2

HAZARD STATEMENTS:

H226	Flammable liquid and vapor
H304	May be fatal if swallowed or enters airways
H314	Causes severe skin burns and eye damage
H317	May cause allergic skin reaction
H318	Causes serious eye damage
H330	Fatal if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H340	May cause genetic defects
H350	May cause cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects

PRECAUTIONARY STATEMENTS:

PREVENTION:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat/hot surfaces/sparks/open flames and other sources of ignition. No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof electrical / ventilation/lighting/handling equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharge.

P260 Do not breath dusts/fume/gas/mist/vapors or spray.

P264 Wash hands and any exposed area thoroughly after handling.

P270 Do not eat, drink or smoke while using this product.

P271 Use only outdoors or in well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P281 Use appropriate personal protective impervious gloves/protective clothing/ OSHA approved eye protection/ face protection.

P285 In case of inadequate ventilation wear appropriate organic vapor respiratory protection.

RESPONSE:

P301+P310 If swallowed: Immediately call a Poison Center / doctor.

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.

P308+P313 If exposed or concerned: Get medical advice / attention.

P310 Immediately call a POISON CENTER/doctor/ emergency responder.

P312 Call a POISON CENTER/doctor if you feel unwell.

P314 Get medical advice/attention if you feel unwell.

P320 Specific treatment is urgent (see . . . on this label).

P321 Specific treatment (see on this label)

P330 Rinse mouth.

P331 Do NOT induce vomiting.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P342+P311 If experiencing respiratory symptoms: Call a Poison Center/doctor.

P363 Wash contaminated clothing before reuse.

P370+P378 In case of fire: Use carbon dioxide (CO2), powder, alcohol-resistant foam to extinguish.

STORAGE:

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

P403+P235 Store in a well-ventilated place. Keep cool.

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 ==========

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COMPONENT	CAS NUMBER	WEIGHT PERCENT	EXPOSURE LIMITS OSHA PEL	ACGIH TLV	OTHER
Homopolymer of HDI	28182-81-2	50 - 75	0.5 MG/M3 PEL		
* Aromatic Petroleum Distillates	64742-95-6	10-25	100 PPM	NA	
+ Trimethylbenzene	95-63-6	16.5	25 PPM	25 PPM	
+^ Cumene	98-82-8	1.13	50 PPM	50 PPM	
+*^ Xylene, mixed isomers	1330-20-7	1.13	100 PPM	100 PPM	STEL 150 PPM
* Hexamethylene Diisocyanate Monomer	822-06-0	.44	0.02 PPM	0.005PPM TWA	

* Chemical(s) that are chronic health hazards. Refer to section 3 for further information.
+ Toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.
^ Hazardous Air Pollutant established by the EPA as directed by the Clean Air Act of 1990.

PRIMARY ROUTES OF EXPOSURE:
Skin contact, eye contact, and inhalation.
EFFECTS OF ACUTE EXPOSURE:
EYES: Contact with eyes may cause irritation including burning, watering, and redness.
SKIN: Contact may cause mild skin irritation including redness, burning, and drying and cracking of skin. Continued exposure may develop into dermatitis. Solvents can penetrate the skin and cause systematic effects similar to those under inhalation symptoms. Isocyanates react with skin protein and moisture and can cause irritation. Prolonged contact with isocyanates can cause swelling, rash, scaling or blistering. In those who have developed skin sensitization, these symptoms can develop as a result of contact with very small amounts of liquid material or even as a result of vapor only exposure.
INHALATION: High vapor concentrations are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anesthesia, asthma, drowsiness, unconsciousness, and other central nervous system effects, and possibly death.
INGESTION: Can cause gastrointestinal irritation, nausea, vomitting and diarrhea. Small amounts aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury.

CHRONIC HEALTH EFFECTS:
Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage (Sometimes referred to as Solvent or Painter's Syndrome). Intentional misuse by deliberately concentrating and inhaling this material may be harmful or fatal. Chronic exposure may also cause damage to the respiratory system, lungs, eyes, skin, gastrointestinal tract, liver, spleen and kidneys. Repeated skin contact may cause persistant irritation or dermatitis.
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
Conditions aggrevated by exposure may include skin disorders, respiratory (asthma-like) disorders, and pre-existing liver or kidney conditions.

========== SECTION 4 - FIRST AID MEASURES ==========

IF ON SKIN: Thoroughly wash exposed area with soap and water. Remove contaminated clothing. Launder contaminated clothing before re-use. If irritation develops and persists, seek medical attention.
IF IN EYES: Flush with large amounts of water for 15 minutes, lifting upper and lower lids occasionally. If symptoms persist, seek medical attention.
If SWALLOWED: Do not induce vomiting. Immediately administer 1-2 glasses of water and contact a physician, hospital emergency room, or poison control center for further advice. Keep person warm, quiet and seek immediate medical attention. Aspiration of material into lungs can cause severe lung damage. VOMITING CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.
INHALATION: Move affected individual to fresh air. If breathing is difficult, qualified personnel should administer oxygen. If breathing has stopped give artificial respiration. If respiratory symptoms develop or persist, seek medical attention.

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

FLASH POINT: 110 F **METHOD USED: TCC**

FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: 1 **UPPER: 7**

EXTINGUISHING MEDIA:

Foam, CO2, or dry chemical is recommended. Water spray is recommended to cool or protect exposed materials or structures.

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. Water may be ineffecive for extinguishment, unless used under favorable conditions by experienced fire fighters. Carbon dioxide can displace oxygen, exercise caution when using CO2 in confined areas.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Vapors may be ignited by heat, sparks, flames, or other sources of ignition. Vapors are heavier than air and may travel considerable distances to a source of ignition where they may cause a flashback or explosion. If container is not properly cooled, it can rupture in the presence of excessive heat.

========== SECTION 6 - ACCIDENTAL RELEASE MEASURES ==========

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

Keep all sources of ignition and hot metal surfaces away from spill/release. Use explosion-proof non-sparking equipment. Stay upwind from area. Isolate danger and keep unauthorized personnel out. Stop source of release if possible with minimal risk. Wear appropriate protective equipment including respiratory protection. Prevent spill from entering sewers, storm drains, or any other unauthorized treatment drainage systems and natural waterways by diking ahead of the spill. Spilled material may be absorbed with an appropriate spill kit. Notify fire authorities and appropriate federal, state, and local agencies if required.

========== 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.

Open container slowly to relieve any pressure. Bond and ground all equipment when transferring from one vessel to another. Static charge can accumulate by flow or agitation. Ignition can occur by static discharage. The use of explosion proof equipment is recommended and may be required. The use of respiratory protection is advised when concentrations exceed any established exposure limits and in confined spaces. Use good industrial and personal hygiene practice, wash thoroughly after handling, and do not wear contaminated clothing.

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:

"Empty" containers retain residue, liquid and vapor, and may be dangerous. Do not cut, weld, pressurize, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may expode and cause severe personal injury or death. All containers should be disposed of in an environmentally safe manner in accordance with all government regulations.

========== SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION ==========

RESPIRATORY PROTECTION:

Engineering or administrative controls in conjunction with a respirator program is recommended to reduce exposure, and as a part of plant hygiene.

A respirator that is recommended or approved for use in isocyanate-containing environments (air-purifying or fresh air-supplied) may be necessary for spray applications or other situations such as high temperature use which may produce inhalation exposures. A air-supplied respirator is recommended. Before an air-purifying respirator can be used, air monitoring must be performed to measure airborne concentrations if isocyanates.

An air-purifying (combination organic vapor and particulate) proven by test to be effective in isocyanate-containing spray environments can be used when ALL of the following conditions are met: Airborne isocyanate monomer concentrations are known to be below 0.05 ppm averaged over 8 hours; and airborne polyisocyante concentrations are below 5 mg/m3

averaged over 8 hours.

Use NIOSH certified end of service life indicator or a change schedule based upon objective information or data to ensure that cartridges are replaced before the end of their service life. In addition, prefilters should be changed whenever breathing resistance increases due to particulate buildup.

VENTILATION:

If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional ventilation or exhaust systems may be required. Where explosive mixtures may be present, electrical systems safe for such locations must be used.

PROTECTIVE GLOVES:

Prevent prolonged or repeated contact by wearing gloves impervious to solvents 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 guidlines.

========== SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ==========

PHYSICAL STATE: Liquid
COLOR: Various colors
ODOR: Hydrocarbon odor
SOLUBILITY IN WATER: Insoluble/Negligible
SPECIFIC GRAVITY (H2O=1): 1.02
VAPOR DENSITY: Heavier than air.
BOILING RANGE: 270 - 308 F
EVAPORATION RATE: Slower than nBuAc

COATING V.O.C.: 382 g/l (3.19 lb/gl)

========== SECTION 10 - STABILITY AND REACTIVITY DATA ==========

STABILITY:

Stable under normal conditions and handling.

CONDITIONS TO AVOID:

All possible sources of ignition.

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, carbon monoxide, various oxides of carbon and nitrogen.

HAZARDOUS POLYMERIZATION:

Will not occur.

========== SECTION 11 - TOXICOLOGICAL INFORMATION ==========

SENSITIZATION:

As as result of previous repeated overexposures or a single large dose, certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanates at levels well below applicable exposure limits. These symptoms could be immediate or delayed several hours after exposure. This increased sensitivity can persist for weeks and in severe cases for several years.

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:

Although no information is available for this specific product mixture, individual components may by themselves may have ecological affects. Trimethylbenzene is a marine pollutant under 49 CFR 172.101.

========== SECTION 13 - DISPOSAL CONSIDERATIONS ==========

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This product is considered a RCRA hazardous waste due to the characterisic(s) of D001 (ignitability). Waste is subject to the land disposal restrictions in 40 CFR 268.40 and may require treatment standards. Consult state and local regulations to determine whether they are more stringent than the federal requirements.

Container contents should be completely used and containers empty prior to discarding. Container rinsate could be considered a RCRA hazardous waste and must be discarded in compliance with all applicable regulations. Larger empty containers, such as drums, should be returned to a professional drum reconditioner. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.

========== SECTION 14 - TRANSPORT INFORMATION ==========

SHIPPING NAME:

Not regulated in containers 119 gallons [450 liters] or less, Combustible Liquid in containers greater that 119 gallons for ground travel.(For containers greater than 119 gallons,vessel, international shipments, or air: UN1263, Paint, 3, III)

==========SECTION 15 - REGULATORY INFORMATION ==========

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

This product does contain a chemical(s) subject to the reporting requirements of SARA Title III, Section 313 (40CFR 372). See section 2.

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 .
Trimethylbenzene	95-63-6	CA,MA,MN,NJ,PA
Cumene	98-82-8	CA,CT,FL,IL,LA,MA,ME,MN,NJ,PA,RI

==========SECTION 16 - OTHER INFORMATION ==========

REVISION DATE: 08/19/14

HMIS CODES:	**H**		**F**	**R**	**P**
	3	*	**2**	**1**	**I**