



Safety Data Sheet

Material Name: E-Tec 504

SDS ID: EPI-0054c

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

E-Tec 504

Product Use

Rust Preventive.

Details of the supplier of the safety data sheet

Electrochemical Products Inc.
17000 West Lincoln Ave
New Berlin, WI 53151
Phone: 262-786-9330
Emergency Phone #: Chemtrec #800-424-9300 (CCN7498)
E-mail: us-sales@epi.com
www.epi.com
Fax: 262-786-9403

Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with paragraph (d) of 29 CFR 1910.1200.

Flammable Liquids - Category 3
Aspiration Hazard - Category 1
Acute Toxicity - Oral - Category 4
Acute Toxicity - Dermal - Category 2
Acute Toxicity - Inhalation - Vapor - Category 3
Skin Corrosion/Irritation - Category 2
Serious Eye Damage/Eye Irritation - Category 2A
Carcinogenicity - Category 2
Specific Target Organ Toxicity - Single Exposure - Category 3
Specific Target Organ Toxicity - Repeated Exposure - Category 2
Hazardous to the Aquatic Environment - Acute - Category 3
Hazardous to the Aquatic Environment - Chronic - Category 3

GHS Label Elements

Symbol(s)



Signal Word



Safety Data Sheet

Material Name: E-Tec 504

SDS ID: EPI-0054c

Danger

Hazard Statement(s)

Harmful if swallowed

Flammable liquid and vapor. (H226)

Harmful if inhaled

Causes serious eye irritation

Causes skin irritation

Suspected of causing cancer

May be fatal if swallowed and enters airways

May cause damage to organs through prolonged or repeated exposure

Precautionary Statement(s)

Prevention

Obtain special instructions before use.

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

Keep container tightly closed.

Keep away from heat/sparks/open flame/hot surfaces - No smoking.

Ground/Bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Take precautionary measures against static discharge.

Use only non-sparking tools.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

Do not breathe dust/fume/gas/mist/vapours/spray.

Do not get in eyes, on skin, or on clothing.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Avoid release to the environment.

Response

None needed according to classification criteria

Storage

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

Store in a well-ventilated place. Keep cool.

Store locked up.

Disposal

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

Statement of Unknown Toxicity

0% of the mixture consists of ingredient(s) of unknown acute toxicity.

Other Hazards

Eye contact can cause severe irritation, discomfort, reddening, watering, pain, and damage. Depending on the duration of contact, skin overexposures may cause reddening, discomfort, and irritation. May be absorbed through the skin. Repeated skin contact may cause dermatitis (dry, red skin). Ingestion is not anticipated to be a significant route of occupational exposure. If this product is swallowed, it will irritate



Safety Data Sheet

Material Name: E-Tec 504

SDS ID: EPI-0054c

the mouth, esophagus, and other tissues of the digestive system. Symptoms of ingestion overexposure include nausea, vomiting, diarrhea, headache, tremors, and central nervous system depression. If mists or vapors of this product are inhaled, mild to moderate irritation of the nose, throat, mouth, lungs, and other tissues of the respiratory system may occur. Symptoms of exposure can include difficulty breathing, irritation of the mucus membranes, coughing, nasal congestion, and a sore throat.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
111-76-2	2-Butoxyethanol	2-3
Trade Secret	Barium Compound	12-15
64742-88-7	Solvent naphtha, petroleum, medium aliphatic	77-80
95-63-6	Benzene, 1,2,4-trimethyl-	4-5
1330-20-7	Xylenes (o-, m-, p- isomers)	1-1.5
98-82-8	Cumene	0-4-0.6

Section 4 - FIRST AID MEASURES

Inhalation

Immediately move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, 100 percent humidified oxygen should be administered by a qualified individual. Seek medical attention immediately.

Skin

Remove contaminated shoes and clothing. Flush affected area with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. Do not use ointments. If skin surface is not damaged, clean affected area thoroughly with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists.

Eyes

Flush immediately with water for at least 15 minutes. Do not rub eyes. If irritation persists, get medical attention.

Ingestion



Safety Data Sheet

Material Name: E-Tec 504

SDS ID: EPI-0054c

Do not induce vomiting. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. Never give anything by mouth to a person who is not fully conscious. Do not leave victim unattended. Seek medical attention immediately.

Note to Physicians

INHALATION: Inhalation overexposure can produce toxic effects. Monitor for respiratory distress. If cough or difficulty in breathing develops, evaluate for upper respiratory tract inflammation, bronchitis, and pneumonitis. Administer supplemental oxygen with assisted ventilation, as required. **INGESTION:** If ingested, this material presents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended. Consider activated charcoal and/or gastric lavage. If patient is obtunded, protect the airway by cuffed endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

SMALL FIRE: Use dry chemicals, carbon dioxide, foam, or inert gas (nitrogen). Carbon dioxide and inert gas can displace oxygen. Use caution when applying carbon dioxide or inert gas in confined spaces.

LARGE FIRE: Use foam, water fog, or water spray. Water fog and spray are effective in cooling containers and adjacent structures. However, water can cause frothing and/or may not extinguish the fire. Water can be used to cool the external walls of vessels to prevent excessive pressure, auto ignition or explosion. **DO NOT** use a solid stream of water directly on the fire as the water may spread the fire to a larger area.

Special Hazards Arising from the Chemical

Combustible Liquid! This material releases vapors when heated above ambient temperatures. Vapors can cause a flash fire. Vapors can travel to a source of ignition and flashback. A vapor and air mixture can create an explosion hazard in confined spaces such as sewers. Use only with adequate ventilation. If container is not properly cooled, it can rupture in the heat of a fire.

Hazardous Combustion Products

Carbon dioxide, carbon monoxide, smoke, fumes, and/or unburned hydrocarbons.

Fire Fighting Measures

Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles. Cover pooling liquid with foam. Containers can build pressure if exposed to radiant heat; cool adjacent containers with flooding quantities of water until well after the fire is out. Withdraw immediately from the area if there is a rising sound from a venting safety device or discoloration of vessels, tanks, or pipelines. Be aware that burning liquid will float on water. Notify appropriate authorities of potential fire and explosion hazard if liquid enter sewers or waterways.



Safety Data Sheet

Material Name: E-Tec 504

SDS ID: EPI-0054c

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, refer to the Emergency Overview on Page 1, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this SDS. Isolate area. Keep unnecessary personnel away.

Methods and Materials for Containment and Cleaning Up

Combustible Liquid! Release causes an immediate fire or explosion hazard. Evacuate all non-essential personnel from immediate area and establish a "regulated zone" with site control and security. A vapor-suppressing foam may be used to reduce vapors. Eliminate all ignition sources. All equipment used when handling this material must be grounded. Stop the leak if it can be done without risk. Do not touch or walk through spilled material. Remove spillage immediately from hard, smooth walking areas. Prevent its entry into waterways, sewers, basements, or confined areas. Absorb or cover with dry earth, sand, or other non-combustible material and transfer to appropriate waste containers. Use clean, non-sparking tools to collect absorbed material.

Environmental Precautions

For large spills, secure the area and control access. Dike far ahead of a liquid spill to ensure complete collection. Water mist or spray may be used to reduce or disperse vapors; but, it may not prevent ignition in closed spaces. This material will float on water and its run-off may create an explosion or fire hazard. Verify that responders are properly HAZWOPER-trained and wearing appropriate respiratory equipment and fire-resistant protective clothing during cleanup operations. In an urban area, cleanup spill as soon as possible; in natural environments, cleanup on advice from specialists. Pick up free liquid for recycle and/or disposal if it can be accomplished safely with explosion-proof equipment. Collect any excess material with absorbent pads, sand, or other inert non-combustible absorbent materials. Place into appropriate waste containers for later disposal. Comply with all laws and regulations.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

A spill or leak can cause an immediate fire or explosion hazard. Keep containers closed and do not handle or store near heat, sparks, or any other potential ignition sources. Avoid contact with oxidizing agents. Do NOT breathe vapor. Use only with adequate ventilation and personal protection. Never siphon by mouth. Avoid contact with eyes, skin, and clothing. Prevent contact with food and tobacco products. Do NOT take internally. When performing repairs and maintenance on contaminated equipment, keep unnecessary persons away from the area. Eliminate all potential ignition sources. Drain and purge equipment, as necessary, to remove material residues. Follow proper entry procedures, including compliance with 29 CFR 1910.146 prior to entering confined spaces such as tanks or pits. Use gloves constructed of impervious materials and protective clothing if direct contact is anticipated. Use appropriate respiratory protection when concentrations exceed any established occupational exposure level (See Section 8). Promptly remove contaminated clothing. Wash exposed skin thoroughly with soap and water after handling. Non-equilibrium conditions may increase the fire hazard associated with this product. A static



Safety Data Sheet

Material Name: E-Tec 504

SDS ID: EPI-0054c

electrical charge can accumulate when this material is flowing through pipes, nozzles or filters and when it is agitated. A static spark discharge can ignite accumulated vapors particularly during dry weather conditions. Always bond receiving containers to the fill pipe before and during loading. Always confirm that receiving container is properly grounded. Bonding and grounding alone may be inadequate to eliminate fire and explosion hazards associated with electrostatic charges. Carefully review operations that may increase the risks associated with static electricity such as tank and container filling, tank cleaning, sampling, gauging, loading, filtering, mixing, agitation, etc. In addition to bonding and grounding, efforts to mitigate the hazards of an electrostatic discharge may include, but are not limited to, ventilation, inerting and/or reduction of transfer velocities. Dissipation of electrostatic charges may be improved with the use of conductivity additives when used with other mitigation efforts, including bonding and grounding. Always keep nozzle in contact with the container throughout the loading process. Do NOT fill any portable container in or on a vehicle. Do NOT use compressed air for filling, discharging or other handling operations. Product container is NOT designed for elevated pressure. Do NOT pressurize, cut, weld, braze solder, drill, or grind on containers. Do NOT expose product containers to flames, sparks, heat or other potential ignition sources. Empty containers may contain material residues which can ignite with explosive force. Observe label precautions.

Conditions for Safe Storage, Including any Incompatibilities

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

Store in a well-ventilated place. Keep cool.

Store locked up.

Keep container tightly closed. Store in a cool, dry, well-ventilated area. Store only in approved containers. Do not store with oxidizing agents. Do not store at elevated temperatures or in direct sunlight. Protect containers against physical damage. Head spaces in tanks and other containers may contain a mixture of air and vapor in the flammable range. Vapor may be ignited by static discharge. Storage area must meet OSHA requirements and applicable fire codes. Additional information regarding the design and control of hazards associated with the handling and storage of flammable and combustible liquids may be found in professional and industrial documents including, but not limited to, the National Fire Protection Association (NFPA) publications NFPA 30 ("Flammable and Combustible Liquid Code"), NFPA 77 ("Recommended Practice on Static Electricity") and the American Petroleum Institute (API) Recommended Practice 2003, ("Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents").

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

2-Butoxyethanol	111-76-2
ACGIH:	20 ppm TWA
NIOSH:	5 ppm TWA; 24 mg/m ³ TWA
	Potential for dermal absorption



Safety Data Sheet

Material Name: E-Tec 504

SDS ID: EPI-0054c

	700 ppm IDLH
Europe:	20 ppm TWA; 98 mg/m ³ TWA
	Possibility of significant uptake through the skin
	50 ppm STEL; 246 mg/m ³ STEL
OSHA (US):	50 ppm TWA; 240 mg/m ³ TWA
	prevent or reduce skin absorption
Mexico:	26 ppm TWA LMPE-PPT; 120 mg/m ³ TWA LMPE-PPT
	75 ppm STEL [LMPE-CT]; 360 mg/m ³ STEL [LMPE-CT]
	Skin - potential for cutaneous absorption
Benzene, 1,2,4-trimethyl-	95-63-6
NIOSH:	25 ppm TWA; 125 mg/m ³ TWA
Europe:	20 ppm TWA; 100 mg/m ³ TWA
Xylenes (o-, m-, p- isomers)	1330-20-7
ACGIH:	100 ppm TWA
	150 ppm STEL
Europe:	50 ppm TWA (pure); 221 mg/m ³ TWA (pure)
	Possibility of significant uptake through the skin (pure)
	100 ppm STEL (pure); 442 mg/m ³ STEL (pure)
OSHA (US):	100 ppm TWA; 435 mg/m ³ TWA
Mexico:	100 ppm TWA LMPE-PPT; 435 mg/m ³ TWA LMPE-PPT
	150 ppm STEL [LMPE-CT]; 655 mg/m ³ STEL [LMPE-CT]
Cumene	98-82-8
ACGIH:	50 ppm TWA
NIOSH:	50 ppm TWA; 245 mg/m ³ TWA
	Potential for dermal absorption
	900 ppm IDLH (10% LEL)



Safety Data Sheet

Material Name: E-Tec 504

SDS ID: EPI-0054c

Europe:	20 ppm TWA; 100 mg/m ³ TWA
	Possibility of significant uptake through the skin
	50 ppm STEL; 250 mg/m ³ STEL
OSHA (US):	50 ppm TWA; 245 mg/m ³ TWA
	prevent or reduce skin absorption
Mexico:	50 ppm TWA LMPE-PPT; 245 mg/m ³ TWA LMPE-PPT
	75 ppm STEL [LMPE-CT]; 365 mg/m ³ STEL [LMPE-CT]
	Skin - potential for cutaneous absorption

EU - Occupational Exposure (98/24/EC) - Binding Biological Limit Values and Health Surveillance Measures

There are no biological limit values for any of this product's components.

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

2-Butoxyethanol (111-76-2)

200 mg/g creatinine Medium: urine Time: end of shift Parameter: Butoxyacetic acid with hydrolysis

Xylenes (o-, m-, p- isomers) (1330-20-7)

1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids

Engineering Controls

Provide ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below. All electrical equipment should comply with the National Electrical Code. An emergency eye wash station and safety shower should be located near the work-station.

Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection

Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Chemical goggles should be worn during transfer operations or when there is a likelihood of misting, splashing, or spraying of this material. A suitable emergency eye wash water and safety shower should be located near the work station.

Skin Protection

Avoid skin contact. Wear long-sleeved fire-retardant garments (e.g., Nomex®) while working with flammable and combustible liquids. Additional chemical-resistant protective gear may be required if splashing or spraying conditions exist. This may include an apron, boots and additional facial protection. If product comes in contact with clothing, immediately remove soaked clothing and shower. Promptly remove and discard contaminated leather goods.

Respiratory Protection

For known vapor concentrations above the occupational exposure guidelines (see below), use a NIOSH-approved organic vapor respirator if adequate protection is provided. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134). For airborne vapor concentrations that exceed the recommended protection factors for



Safety Data Sheet

Material Name: E-Tec 504

SDS ID: EPI-0054c

organic vapor respirators, use a full-face, positive-pressure, supplied air respirator. Due to fire and explosion hazards, do not enter atmospheres containing concentrations greater than 10% of the lower flammable limit of this product.

Glove Recommendations

solvent-resistant, impervious gloves.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Amber liquid	Physical State	Liquid
Odor	Solvent	Color	Amber
Odor Threshold	Not available	pH	Not available
Melting Point	Not available	Boiling Point	314 - 406 °F (157-208 °C in regards to Mineral Spirits)
Freezing point	Not available	Evaporation Rate	Not available
Boiling Point Range	Not available	Flammability (solid, gas)	Not available
Autoignition	446 °F (Mineral Spirits 230 °C)	Flash Point	126 °F [closed cup] (52 °C)
Lower Explosive Limit	Not available	Decomposition	Not available
Upper Explosive Limit	Not available	Vapor Pressure	0.22 mm Hg at 20 °C (Mineral Spirits info)
Vapor Density (air=1)	4.7 (air = 1 Mineral Spirits info)	Specific Gravity (water=1)	0.8 - 0.825
Water Solubility	Negligible	Partition coefficient: n-octanol/water	Not available
Viscosity	Not available	Solubility (Other)	Not available
Density	Not available	VOC	696 grams/liter (5.81 #/gallon)

Section 10 - STABILITY AND REACTIVITY

Reactivity



Safety Data Sheet

Material Name: E-Tec 504

SDS ID: EPI-0054c

Not expected to occur.

Chemical Stability

This is a stable material.

Possibility of Hazardous Reactions

Hazardous polymerization will not occur under normal conditions of storage and use.

Conditions to Avoid

Keep away from heat, flame and other potential ignition sources. Keep away from strong oxidizing conditions and agents.

Incompatible Materials

Strong acids, alkalies, and oxidizers such as liquid chlorine and oxygen.

Hazardous decomposition products

Carbon dioxide, carbon monoxide, smoke, fumes, and/or unburned hydrocarbons.

Section 11 - TOXICOLOGICAL INFORMATION

Acute and Chronic Toxicity

The National Toxicology Program (NTP) conducted two-year carcinogenicity studies in rats and mice with Stoddard Solvent IIC (less than 2% aromatics). The studies indicated that there was some evidence of carcinogenic activity in male rats (adrenal medulla neoplasms and renal tubule adenoma) but no evidence of carcinogenic activity in female rats. Further, there was equivocal evidence of carcinogenic activity in female mice (hepatocellular adenoma) but no evidence of carcinogenic activity in male mice. A low carcinogenic potential is suggested by a lack of genotoxic potential identified in in vivo and in vitro genetic toxicity tests (with and without metabolic activation).

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

2-Butoxyethanol (111-76-2)

Oral LD50 Rat 470 mg/kg

Dermal LD50 Rabbit 99 mg/kg

Inhalation LC50 Rat 450 ppm 4 h

Solvent naphtha, petroleum, medium aliphatic (64742-88-7)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rabbit 3000 mg/kg

Inhalation LC50 Rat >5.28 mg/L 4 h

Benzene, 1,2,4-trimethyl- (95-63-6)

Oral LD50 Rat 3280 mg/kg

Dermal LD50 Rabbit >3160 mg/kg

Inhalation LC50 Rat 18 g/m³ 4 h

Xylenes (o-, m-, p- isomers) (1330-20-7)

Oral LD50 Rat 3500 mg/kg

Dermal LD50 Rabbit >4350 mg/kg



Safety Data Sheet

Material Name: E-Tec 504

SDS ID: EPI-0054c

Inhalation LC50 Rat 29.08 mg/L 4 h
Cumene (98-82-8)
Oral LD50 Rat 1400 mg/kg
Dermal LD50 Rabbit 12300 µL/kg
Inhalation LC50 Rat >3577 ppm 6 h

Immediate Effects

No information on significant adverse effects.

Delayed Effects

No information on significant adverse effects.

Irritation/Corrosivity Data

No data available.

Respiratory Sensitization

No data available.

Dermal Sensitization

No data available.

Component Carcinogenicity

2-Butoxyethanol	111-76-2
ACGIH:	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
IARC:	Monograph 88 [2006] (Group 3 (not classifiable))
DFG:	Category 4 (no significant contribution to human cancer)
Xylenes (o-, m-, p-isomers)	1330-20-7
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
IARC:	Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))
Cumene	98-82-8
IARC:	Monograph 101 [2013] (Group 2B (possibly carcinogenic to humans))
NTP:	Reasonably Anticipated To Be A Human Carcinogen
DFG:	Category 3B (could be carcinogenic for man)
OSHA:	Present

Germ Cell Mutagenicity

No data available.

Tumorigenic Data



Safety Data Sheet

Material Name: E-Tec 504

SDS ID: EPI-0054c

No data available

Reproductive Toxicity

No data available.

Specific Target Organ Toxicity - Single Exposure

No data available.

Specific Target Organ Toxicity - Repeated Exposure

No data available.

Aspiration hazard

No data available.

Medical Conditions Aggravated by Exposure

No data available.

Section 12 - ECOLOGICAL INFORMATION

Component Analysis - Aquatic Toxicity

2-Butoxyethanol	111-76-2
Fish:	LC50 96 h Lepomis macrochirus 1490 mg/L [static]; LC50 96 h Lepomis macrochirus 2950 mg/L
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L EPA
Solvent naphtha, petroleum, medium aliphatic	64742-88-7
Fish:	LC50 96 h Pimephales promelas 800 mg/L [static]
Algae:	EC50 96 h Pseudokirchneriella subcapitata 450 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna >100 mg/L IUCLID
Benzene, 1,2,4-trimethyl-	95-63-6
Fish:	LC50 96 h Pimephales promelas 7.19 - 8.28 mg/L [flow-through]
Invertebrate:	EC50 48 h Daphnia magna 6.14 mg/L IUCLID
Xylenes (o-, m-, p-isomers)	1330-20-7
Fish:	LC50 96 h Pimephales promelas 13.4 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 2.661 - 4.093 mg/L [static]; LC50 96 h Oncorhynchus



Safety Data Sheet

Material Name: E-Tec 504

SDS ID: EPI-0054c

	mykiss 13.5 - 17.3 mg/L; LC50 96 h Lepomis macrochirus 13.1 - 16.5 mg/L [flow-through]; LC50 96 h Lepomis macrochirus 19 mg/L; LC50 96 h Lepomis macrochirus 7.711 - 9.591 mg/L [static]; LC50 96 h Pimephales promelas 23.53 - 29.97 mg/L [static]; LC50 96 h Cyprinus carpio 780 mg/L [semi-static]; LC50 96 h Cyprinus carpio >780 mg/L; LC50 96 h Poecilia reticulata 30.26 - 40.75 mg/L [static]
Invertebrate:	EC50 48 h water flea 3.82 mg/L; LC50 48 h Gammarus lacustris 0.6 mg/L
Cumene	98-82-8
Fish:	LC50 96 h Pimephales promelas 6.04 - 6.61 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 4.8 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 2.7 mg/L [semi-static]; LC50 96 h Poecilia reticulata 5.1 mg/L [semi-static]
Algae:	EC50 72 h Pseudokirchneriella subcapitata 2.6 mg/L EPA
Invertebrate:	EC50 48 h Daphnia magna 0.6 mg/L IUCLID; EC50 48 h Daphnia magna 7.9 - 14.1 mg/L [static] EPA

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Maximize material recovery for reuse or recycling. Recovered non-usable material may be regulated by US EPA as a hazardous waste due to its ignitibility (D001) and/or its toxic (D018) characteristics. Conditions of use may cause this material to become a "hazardous waste", as defined by federal or state regulations. It is the responsibility of the user to determine if the material is a RCRA "hazardous waste" at the time of disposal. Transportation, treatment, storage and disposal of waste material must be conducted in accordance with RCRA regulations (see 40 CFR 260 through 40 CFR 271). State and/or local regulations may be more restrictive. Contact your regional US EPA office for guidance concerning case specific disposal issues.

Section 14 - TRANSPORT INFORMATION

US DOT Information:

No Classification assigned.

TDG Information:

Shipping Name: Petroleum Distillates, n.o.s.

Hazard Class: 3

UN#: UN1268



Safety Data Sheet

Material Name: E-Tec 504

SDS ID: EPI-0054c

Packing Group: III
Required Label(s): Flammable

Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Benzene, 1,2,4-trimethyl-	95-63-6
SARA 313:	1 % de minimis concentration
Xylenes (o-, m-, p- isomers)	1330-20-7
SARA 313:	1 % de minimis concentration
CERCLA:	100 lb final RQ; 45.4 kg final RQ
Cumene	98-82-8
SARA 313:	1 % de minimis concentration
CERCLA:	5000 lb final RQ; 2270 kg final RQ

All components are on the U.S. EPA TSCA Inventory List. Supplier(s) of proprietary component(s) have stated that their components appear on the Canadian DSL/NDSL.

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
2-Butoxyethanol	111-76-2	Yes	Yes	Yes	Yes	Yes
Solvent naphtha, petroleum, medium aliphatic	64742-88-7	No	No	No	Yes	No
Benzene, 1,2,4-trimethyl-	95-63-6	No	Yes	Yes	Yes	Yes
Xylenes (o-, m-, p- isomers)	1330-20-7	Yes	Yes	Yes	Yes	Yes
Cumene	98-82-8	Yes	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer

Cumene	98-82-8
--------	---------



Safety Data Sheet

Material Name: E-Tec 504

SDS ID: EPI-0054c

Carc:	carcinogen , 4/6/2010
-------	-----------------------

Canada Regulations

This material is a controlled product under Canadian WHMIS regulations.

Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

2-Butoxyethanol	111-76-2
	1 %
Benzene, 1,2,4-trimethyl-	95-63-6
	0.1 %
Cumene	98-82-8
	1 %

Component Analysis - Inventory

2-Butoxyethanol (111-76-2)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Barium Compound (Trade Secret)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	No	Yes	No	No	Yes	No	Yes	Yes	No

Solvent naphtha, petroleum, medium aliphatic (64742-88-7)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Benzene, 1,2,4-trimethyl- (95-63-6)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX



Safety Data Sheet

Material Name: E-Tec 504

SDS ID: EPI-0054c

Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes
-----	-----	-----	-----	-----	-----	----	-----	----	-----	-----	-----

Xylenes (o-, m-, p- isomers) (1330-20-7)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Cumene (98-82-8)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Section 16 - OTHER INFORMATION

HMIS Rating

Health: 1 * Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

NFPA Ratings

Health: 1 Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation,



Safety Data Sheet

Material Name: E-Tec 504

SDS ID: EPI-0054c

Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.