



Safety Data Sheet

Material Name: E-Tec 522

SDS ID: EPI-0104c

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

E-Tec 522

Product Use

water based. wax.

Manufacturer Information

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.

Skin Corrosion/Irritation - Category 1
Serious Eye Damage/Eye Irritation - Category 1

GHS Label Elements**Symbol(s)****Signal Word**

Danger

Hazard Statement(s)

Causes severe skin burns and eye damage

Precautionary Statement(s)**Prevention**



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Wear protective gloves/protective clothing/eye protection/face protection
Wash thoroughly after handling
Do not breathe dusts or mists

Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
Immediately call a POISON CENTER or doctor
Specific treatment (see label)

Storage

Store locked up

Disposal

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

Other Hazards

Do not ingest. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Avoid breathing vapor or mist. Use with adequate ventilation. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable. Keep container closed.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
7732-18-5	Water	45-50
Trade Secret	Paraffin waxes and Hydrocarbon waxes	48-53
110-91-8	Morpholine	0.5-1

Section 4 - FIRST AID MEASURES

Inhalation

If inhaled, immediately remove the affected person to fresh air.

Skin



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IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Eyes

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

Ingestion

If swallowed, give milk or water to dilute. Seek medical attention immediately. Never give anything by mouth to an unconscious person. Call a physician immediately.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Dry chemical, foam, carbon dioxide, water fog.

Unsuitable Extinguishing Media

None identified.

Special Hazards Arising from the Chemical

None identified.

Hazardous Combustion Products

Carbon monoxide and carbon dioxides.

Special Protective Equipment and Precautions for Firefighters

None identified.

Fire Fighting Measures

Use methods suitable to fight surrounding fire.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye/face protection.

Methods and Materials for Containment and Cleaning Up

Contain the spill. Mop up or squeegee into container or absorb with inert material.

Environmental Precautions

Do not allow to enter sewers or waterways.

Section 7 - HANDLING AND STORAGE



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Precautions for Safe Handling

Wash thoroughly after handling. Containers, even those that have been emptied, will retain product residue and vapors. Always obey hazard warnings on containers as if they were full.

Conditions for Safe Storage, Including any Incompatibilities

Store locked up

Keep containers closed when not in use. Store in a cool, dry, well-ventilated area away from incompatible materials (see Section 10).

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Paraffin waxes and Hydrocarbon waxes	Trade Secret
ACGIH:	2 mg/m ³ TWA fume
NIOSH:	2 mg/m ³ TWA fume
Mexico:	2 mg/m ³ TWA LMPE-PPT fume
	6 mg/m ³ STEL [LMPE-CT] fume
Morpholine	110-91-8
ACGIH:	20 ppm TWA
	Skin - potential significant contribution to overall exposure by the cutaneous route
NIOSH:	20 ppm TWA; 70 mg/m ³ TWA
	30 ppm STEL; 105 mg/m ³ STEL
	Potential for dermal absorption
	1400 ppm IDLH (10% LEL)
Europe:	10 ppm TWA; 36 mg/m ³ TWA
	20 ppm STEL; 72 mg/m ³ STEL
OSHA (US):	20 ppm TWA; 70 mg/m ³ TWA
	prevent or reduce skin absorption
Mexico:	20 ppm TWA LMPE-PPT; 70 mg/m ³ TWA LMPE-PPT



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	30 ppmSTEL [LMPE-CT]; 105 mg/m ³ STEL [LMPE-CT]
	Skin - potential for cutaneous absorption

Biological limit value

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

Engineering Controls

Local exhaust is suggested for use, where possible, in enclosed or confined spaces.

Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection

Safety glasses. It is generally recognized that contact lenses should not be worn when working with chemicals because they may contribute to the severity of an eye injury.

Skin Protection

Wear rubber gloves, long sleeved shirt and trousers.

Respiratory Protection

Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below applicable exposure limits.

Glove Recommendations

Wear rubber gloves.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Opaque liquid	Physical State	Liquid
Odor	Mild,characteristic	Color	Tan
Odor Threshold	Not available	pH	Not available
Melting Point	Not available	Boiling Point	212 °F
Freezing point	32 °F (0 °C)	Evaporation Rate	(Approx. equal to Water)
Boiling Point Range	Not available	Flammability (solid, gas)	Not available
Autoignition	Not available	Flash Point	Not available
Lower Explosive Limit	Not available	Decomposition	Not available
Upper Explosive Limit	Not available	Vapor Pressure	Not available



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Vapor Density (air=1)	(Approx. equal to water)	Specific Gravity (water=1)	0.99 - 1.02
Water Solubility	Completely	Partition coefficient: n-octanol/water	Not available
Viscosity	Not available	Solubility (Other)	Not available
Density	Not available		

Section 10 - STABILITY AND REACTIVITY

Reactivity

No known hazardous reactions.

Chemical Stability

This is a stable material.

Possibility of Hazardous Reactions

None identified. Hazardous polymerization will not occur.

Incompatible Materials

Strong oxidizing agents, acids.

Hazardous decomposition products

None identified. Carbon monoxide and carbon dioxides.

Thermal decomposition products

None identified.

Section 11 - TOXICOLOGICAL INFORMATION

Acute and Chronic Toxicity

Component Analysis - LD50/LC50

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

Water (7732-18-5)

Oral LD50Rat >90 mL/kg

Morpholine (110-91-8)

Oral LD50Rat 1050 mg/kg

Inhalation LC50Rat 8000 ppm 8 h

Immediate Effects

No information on significant adverse effects.



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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

Morpholine	110-91-8
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
IARC:	Monograph 71 [1999]; Monograph 47 [1989](Group 3 (not classifiable))

Germ Cell Mutagenicity

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

Morpholine	110-91-8
Fish:	LC50 96 h <i>Lepomis macrochirus</i> 350 mg/L [static]; LC50 96 h <i>Oncorhynchus mykiss</i> 375 - 460 mg/L; LC50 96 h <i>Brachydanio rerio</i> >1000 mg/L [static]
Algae:	EC50 96 h <i>Pseudokirchneriella subcapitata</i> 28 mg/L [static] EPA



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Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Section 14 - TRANSPORT INFORMATION

US DOT Information:

No Classification assigned.

TDG Information:

No Classification assigned.

Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations

None of this products components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

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.

SARA Section 311/312 (40 CFR 370 Subparts B and C)

Acute Health: no **Chronic Health:** no **Fire:** no **Pressure:** no **Reactivity:** no

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
Paraffin waxes and Hydrocarbon waxes	Trade Secret	Yes	Yes	Yes	Yes	Yes
Morpholine	110-91-8	Yes	Yes	Yes	Yes	Yes

Not listed under California Proposition 65

Canada Regulations

Not a controlled product under WHMIS.

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



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products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Morpholine	110-91-8
	1 %

Component Analysis - Inventory

Water (7732-18-5)

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

Paraffin waxes and Hydrocarbon waxes (Trade Secret)

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

Morpholine (110-91-8)

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

Section 16 - OTHER INFORMATION

HMIS Rating

Health: 1 Fire: 0 Reactivity: 0

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

NFPA Ratings

Health: 1 Fire: 0 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



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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, 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.