



Safety Data Sheet

Material Name: EPI Coagulant

SDS ID: EPI-0431c

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

EPI Coagulant

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.

Acute Toxicity - Oral - Category 4
Skin Corrosion/Irritation - Category 2
Serious Eye Damage/Eye Irritation - Category 1
Hazardous to the Aquatic Environment - Acute - Category 3

GHS Label Elements

Symbol(s)



Signal Word

Danger

Hazard Statement(s)

Harmful if swallowed
Causes skin irritation
Causes serious eye damage
Harmful to aquatic life

Precautionary Statement(s)

Prevention



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Wear protective gloves/protective clothing/eye protection/face protection
Wash thoroughly after handling
Do not eat, drink or smoke when using this product
Avoid release to the environment

Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

IF ON SKIN: Wash with plenty of soap and water

Take off contaminated clothing and wash before reuse

Rinse mouth

Immediately call a POISON CENTER or doctor

Specific treatment (see label)

Storage

None needed according to classification criteria

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

This product may be severely irritating to corrosive to the eyes and skin. This product may irritate the respiratory tract. Harmful if inhaled or absorbed through the skin. May be harmful or fatal if swallowed.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
7732-18-5	Water	65-75
7705-08-0	Iron trichloride	20-25

Section 4 - FIRST AID MEASURES

Inhalation

Allow the victim to rest in a well ventilated area. Monitor for respiratory distress. Seek immediate medical attention.

Skin

If the chemical got onto the clothed portion of the body, remove the contaminated clothes, shoes, and jewelry, protecting your own hands and body. Place the victim under a deluge shower for at least 15



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minutes. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap or epsom salts. If irritation persists, seek medical attention. Wash contaminated clothing before reusing, discard contaminated shoes.

Eyes

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek immediate medical attention.

Ingestion

Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. If conscious, give lots of water, milk, or dilute solution of any soluble calcium or magnesium salt to rinse mouth and drink. Seek immediate medical attention.

Section 5 - FIRE FIGHTING MEASURES

Hazardous Combustion Products

Oxides of carbon. Irritating and toxic gases may be released during a fire.

Fire Fighting Measures

Dry chemical, foam, carbon dioxide, water fog.

Special Protective Equipment and Precautions for Firefighters

Firefighters should wear full-face, self contained breathing apparatus and impervious protective clothing. Firefighters should avoid inhaling any combustion products.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Wear appropriate protective equipment and clothing during clean-up. Isolate area. Keep unnecessary personnel away.

Environmental Precautions

Dike the spill with sand or earth. Sweep up and shovel into suitable containers for disposal.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Wash thoroughly after handling.

Conditions for Safe Storage, Including any Incompatibilities

None needed according to classification criteria



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Keep container tightly closed.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

ACGIH, NIOSH, EU, OSHA (US) and Mexico have not developed exposure limits for any of this product's components

Biological limit value

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

Engineering Controls

Use local exhaust ventilation.

Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection

Safety glasses or chemical goggles. 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

The use of rubber gloves, long sleeved shirt and trousers are required.

Respiratory Protection

Wear a dust mask if dust is generated above exposure limits.

Glove Recommendations

The use of rubber gloves is recommended.

Protective Materials

Eye wash fountain and emergency showers are recommended.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	red brown solution	Physical State	Liquid
Odor	Odorless	Color	red brown
Odor Threshold	Not available	pH	0 - 1
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



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Lower Explosive Limit	Not available	Decomposition	Not available
Upper Explosive Limit	Not available	Vapor Pressure	Not available
Vapor Density (air=1)	(Approx. equal to water)	Specific Gravity (water=1)	1.12 - 1.18
Water Solubility	Completely	Partition coefficient: n-octanol/water	Not available
Viscosity	Not available	Solubility (Other)	Not available
Density	Not available	VOC	0

Section 10 - STABILITY AND REACTIVITY

Reactivity

Will not occur.

Chemical Stability

This is a stable material.

Possibility of Hazardous Reactions

Will not occur.

Conditions to Avoid

Avoid strong oxidizing agents. Avoid Strong reducing agents. This product may react with strong alkalis. This product may react with light metals (aluminum) to form hydrogen gas.

Incompatible Materials

This product may react with strong reducing agents, metals, and strong bases. Reactive with oxidizing agents.

Hazardous decomposition products

Hydrogen Chloride and Hydrogen gas.

Thermal decomposition products

Carbon monoxide, carbon dioxide and other hydrocarbon fragments.

Section 11 - TOXICOLOGICAL INFORMATION

Acute and Chronic Toxicity

Component Analysis - LD50/LC50



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

Water (7732-18-5)

Oral LD50 Rat >90 mL/kg

Iron trichloride (7705-08-0)

Oral LD50 Rat 450 mg/kg

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

None of this product's components are listed by ACGIH, IARC, NTP, DFG or OSHA

Germ Cell Mutagenicity

No data available.

Tumorigenic Data

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



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Iron trichloride	7705-08-0
Fish:	LC50 96 h Lepomis macrochirus 20.26 mg/L [semi-static]; LC50 96 h Pimephales promelas 20.95 - 22.56 mg/L [semi-static]
Invertebrate:	EC50 48 h Daphnia magna 27.9 mg/L IUCLID; EC50 48 h Daphnia magna 9.6 mg/L [static] EPA

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Transport waste material to an authorized waste location, or incinerate under controlled conditions.

Section 14 - TRANSPORT INFORMATION

US DOT Information:

Shipping Name: Ferric Chloride Solution

Hazard Class: 8

UN/NA #: 2582

Packing Group: II

Required Label(s): Corrosive

TDG Information:

Shipping Name: Ferric Chloride Solution

Hazard Class: 8

UN#: 2582

Packing Group: II

Required Label(s): Corrosive

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.

Iron trichloride	7705-08-0
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CERCLA:	1000 lb final RQ; 454 kg final RQ
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All components are on the U.S. EPA TSCA Inventory List. This product is in compliance with TSCA.

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
Water	7732-18-5	No	No	No	No	Yes
Iron trichloride	7705-08-0	Yes	Yes	No	Yes	Yes

Not listed under California Proposition 65

Canada Regulations

This material is not a controlled product under Canadian WHMIS regulations.

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

Iron trichloride (7705-08-0)

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: 2 Fire: 0 Reactivity: 0

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

NFPA Ratings

Health: 2 Fire: 0 Reactivity: 0

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

Key / Legend



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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, 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.