

# ELECTRO - RIGHT

Chemwatch Material Safety Data Sheet  
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## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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### PRODUCT NAME

ELECTRO - RIGHT

### STATEMENT OF HAZARDOUS NATURE

**CONSIDERED A HAZARDOUS SUBSTANCE ACCORDING TO OSHA 29 CFR  
1910.1200.**

### SUPPLIER

Company: Aquarium Pharmaceuticals Incorporated  
Address:  
PO Box 218  
Chalfont  
PA, 18914-0218  
USA  
Telephone: +1 215 822 8181  
Emergency Tel: +1800 222 1222 (US Only)

Company: Aquarium Pharmaceuticals Incorporated  
Address:  
50 East Hamilton Street  
Chalfont  
PA, 18914  
USA  
Telephone: +1 215 822 8181

### PRODUCT USE

Used according to manufacturers directions. For product 175.

### SYNONYMS

"Solution ID# 3308"

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## Section 2 - COMPOSITION / INFORMATION ON INGREDIENTS

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NAME	CAS RN	%
calcium chloride	10043-52-4	8.4
magnesium chloride	7786-30-3	6.2
Aloes, extract	85507-69-3	4.5
sodium chloride	7647-14-5	1.9
water	7732-18-5	78

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## Section 3 - HAZARDS IDENTIFICATION

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### CANADIAN WHMIS SYMBOLS



### EMERGENCY OVERVIEW

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Section 3 - HAZARDS IDENTIFICATION

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## RISK

Irritating to eyes.  
Cumulative effects may result following exposure\*.

## POTENTIAL HEALTH EFFECTS

### ACUTE HEALTH EFFECTS

#### SWALLOWED

The material has NOT been classified as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g. liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality (death) rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, unintentional ingestion is not thought to be cause for concern.

#### EYE

This material can cause eye irritation and damage in some persons. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

#### SKIN

The material is not thought to produce adverse health effects or skin irritation following contact (as classified using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

#### INHALED

Not normally a hazard due to non-volatile nature of product. The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

### CHRONIC HEALTH EFFECTS

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. The material may accumulate in the human body and progressively cause tissue damage.

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## Section 4 - FIRST AID MEASURES

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#### SWALLOWED

- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Center or a doctor.

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Section 4 - FIRST AID MEASURES

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## EYE

If this product comes in contact with the eyes:

- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- If pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

## SKIN

If skin or hair contact occurs:

- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

## INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

## NOTES TO PHYSICIAN

Treat symptomatically.

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## Section 5 - FIRE FIGHTING MEASURES

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Flash Point (F): Not Applicable

Lower Explosive Limit (%): Not Applicable

Upper Explosive Limit (%): Not Applicable

Autoignition Temp (F): Not Applicable

## EXTINGUISHING MEDIA

- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

## FIRE FIGHTING

- Alert Emergency Responders and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves for fire only.
- Prevent, by any means available, spillage from entering drains or water course.
- Use fire fighting procedures suitable for surrounding area.
- Do not approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.
- Equipment should be thoroughly decontaminated after use.

## GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

Decomposition may produce toxic fumes of.

May emit poisonous fumes.

May emit corrosive fumes., hydrogen chloride.

## FIRE INCOMPATIBILITY

None known.

## PERSONAL PROTECTION

Glasses:

Chemical goggles.

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Section 5 - FIRE FIGHTING MEASURES

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Gloves:  
PVC chemical resistant type.  
Respirator:  
Particulate

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## Section 6 - ACCIDENTAL RELEASE MEASURES

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### MINOR SPILLS

- Clean up all spills immediately.
- Avoid breathing vapors and contact with skin and eyes.
- Control personal contact by using protective equipment.
- Contain and absorb spill with sand, earth, inert material or vermiculite.
- Wipe up.
- Place in a suitable labeled container for waste disposal.

### MAJOR SPILLS

Moderate hazard.

- Clear area of personnel and move upwind.
- Alert Emergency Responders and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- Stop leak if safe to do so.
- Contain spill with sand, earth or vermiculite.
- Collect recoverable product into labeled containers for recycling.
- Neutralize/decontaminate residue.
- Collect solid residues and seal in labeled drums for disposal.
- Wash area and prevent runoff into drains.
- After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.
- If contamination of drains or waterways occurs, advise emergency services.

### ACUTE EXPOSURE GUIDELINE LEVELS (AEGLE) (in ppm)

AEGLE 1: The airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure.

AEGLE 2: The airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.

AEGLE 3: The airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience life-threatening health effects or death.

### EMERGENCY RESPONSE PLANNING GUIDELINES (ERPG)

The maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour WITHOUT experiencing or developing

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## Section 6 - ACCIDENTAL RELEASE MEASURES

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life-threatening health effects is:

water 500 mg/m<sup>3</sup>

irreversible or other serious effects or symptoms which could impair an individual's ability to take protective action is:

water 500 mg/m<sup>3</sup>

other than mild, transient adverse effects without perceiving a clearly defined odour is:

water 500 mg/m<sup>3</sup>

The threshold concentration below which most people will experience no appreciable risk of health effects:

water 500 mg/m<sup>3</sup>

American Industrial Hygiene Association (AIHA)

Ingredients considered according exceed the following cutoffs

Very Toxic (T+) >= 0.1%	Toxic (T) >= 3.0%
R50 >= 0.25%	Corrosive (C) >= 5.0%
R51 >= 2.5%	
else >= 10%	

where percentage is percentage of ingredient found in the mixture

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## Section 7 - HANDLING AND STORAGE

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### PROCEDURE FOR HANDLING

- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Avoid contact with moisture.
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke.
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately. Launder contaminated clothing before re-use.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.
- Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

### RECOMMENDED STORAGE METHODS

- Polyethylene or polypropylene container.
- Packing as recommended by manufacturer
- Check all containers are clearly labeled and free from leaks.

### STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.

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Section 7 - HANDLING AND STORAGE

- Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storing and handling recommendations.

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE CONTROLS

Source	Material	TWA ppm	TWA mg/m <sup>3</sup>	STEL ppm	STEL mg/m <sup>3</sup>	Peak ppm	Peak mg/m <sup>3</sup>
Canada Ontario Occupational Exposure Limits	Calcium chloride		5				
US - California Permissible Exposure Limits for Chemical Contaminants	Manganese and compounds, as Mn	--	0.2				
No data available:	magnesium chloride as (CAS: 7786-30-3) / (CAS: 7791-18-6)						
No data available:	Aloes, extract as (CAS: 85507-69-3) / (CAS: 94349-62-9)						
No data available:	sodium chloride as (CAS: 7647-14-5)						
No data available:	water as (CAS: 7732-18-5)						

No data for Electro - Right.

### EXPOSURE STANDARDS FOR MIXTURE

"Worst Case" computer-aided prediction of spray/ mist or fume/ dust components and concentration:

"Worst Case" computer-aided prediction of spray/ mist or fume/ dust components and concentration:

Composite Exposure Standard for Mixture (TWA) :100 mg/m<sup>3</sup>.

### INGREDIENT DATA

For each of the following

CALCIUM CHLORIDE:

MAGNESIUM CHLORIDE:

ALOES, EXTRACT:

SODIUM CHLORIDE:

Dusts not otherwise classified, as inspirable dust;

ES TWA: 10 mg/m<sup>3</sup>.

WATER:

No exposure limits set by NOHSC or ACGIH.

### PERSONAL PROTECTION

#### EYE

- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them. DO NOT wear contact lenses.

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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### HANDS/FEET

Wear chemical protective gloves, eg. PVC.

Wear safety footwear or safety gumboots, eg. Rubber.

### OTHER

- Overalls.
- P.V.C. apron.
- Barrier cream.
- Skin cleansing cream.
- Eye wash unit.

### RESPIRATOR

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant.

Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Breathing Zone Level ppm (volume)	Maximum Protection Factor	Half-face Respirator	Full-Face Respirator
1000	10	-1 P	-
1000	50	-	-1 P
5000	50	Airline*	-
5000	100	-	-2 P
10000	100	-	-3 P
	100+		Airline* *

\* - Continuous Flow \*\* - Continuous-flow or positive pressure demand.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required.

Use appropriate NIOSH-certified respirator based on informed professional judgement. In conditions where no reasonable estimate of exposure can be made, assume the exposure is in a concentration IDLH and use NIOSH-certified full face pressure demand SCBA with a minimum service life of 30 minutes, or a combination full facepiece pressure demand SAR with auxiliary self-contained air supply. Respirators provided only for escape from IDLH atmospheres shall be NIOSH-certified for escape from the atmosphere in which they will be used.

### ENGINEERING CONTROLS

General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in specific circumstances. If risk of overexposure exists, wear an approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

### PHYSICAL PROPERTIES

Liquid.

Mixes with water.

Molecular Weight: Not Applicable

Boiling Range (C): Not Available

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## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Melting Range (C): Not Available

Solubility in water (g/L): Miscible

pH (1% solution): Not Available

Volatile Component (%vol): Not Available

Relative Vapor Density (air=1): Not Available

Lower Explosive Limit (%): Not Applicable

Autoignition Temp (C): Not Applicable

State: Liquid

Specific Gravity (water=1): 1.113

pH (as supplied): 2.1-2.6

Vapor Pressure (kPa): Not Available

Evaporation Rate: Not Available

Flash Point (C): Not Applicable

Upper Explosive Limit (%): Not Applicable

Decomposition Temp (°C): Not Available

### APPEARANCE

Clear acidic liquid with no odor; mixes with water.

## Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

### CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerization will not occur.

### STORAGE INCOMPATIBILITY

None known.

## Section 11 - TOXICOLOGICAL INFORMATION

### Electro - Right

Not available. Refer to individual constituents.

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances

#### CALCIUM CHLORIDE:

##### TOXICITY

Oral (rat) LD50: 1000 mg/kg

Eye (unknown): severe\*

##### IRRITATION

Skin (unknown): moderate\*

[ICI]

#### MAGNESIUM CHLORIDE:

##### TOXICITY

Oral (rat) LD50: 2800 mg/kg

##### IRRITATION

Nil Reported

#### ALOES, EXTRACT:

Aloe barbadensis Mill., extract

Intraperitoneal (mouse) LD50: 250 mg/kg

Nil reported

#### SODIUM CHLORIDE:

##### TOXICITY

Oral (rat) LD50: 3000 mg/kg

Oral (human) TDLo: 12357 mg/kg/23d

Oral Lowest Toxic Dose (Human): 8.2 mg/kg Eye

(rabbit): 100 mg/24h - Moderate

##### IRRITATION

Skin (rabbit): 500 mg/24h - Mild

Eye (rabbit): 10 mg - Moderate

#### WATER:

continued...

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## Section 11 - TOXICOLOGICAL INFORMATION

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No significant acute toxicological data identified in literature search.

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## Section 12 - ECOLOGICAL INFORMATION

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Marine Pollutant: Not Determined  
DO NOT discharge into sewer or waterways.  
Refer to data for ingredients, which follows:

CALCIUM CHLORIDE:  
Fish LC50 (96hr.) (mg/l): 8.4 (24hr)

SODIUM CHLORIDE:  
TLm 96 > 1000 ppm

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## Section 13 - DISPOSAL CONSIDERATIONS

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### Disposal Instructions

All waste must be handled in accordance with local, state and federal regulations.

- Recycle wherever possible.
- Consult manufacturer for recycling options or consult Waste Management Authority for disposal if no suitable treatment or disposal facility can be identified.
- Dispose of by: Burial in a licensed land-fill or Incineration in a licensed apparatus (after admixture with suitable combustible material)
- Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

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## Section 14 - TRANSPORTATION INFORMATION

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NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: UN, IATA, IMDG

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## Section 15 - REGULATORY INFORMATION

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### RISK

Risk Codes  
R36

Risk Phrases  
Irritating to eyes.

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Section 15 - REGULATORY INFORMATION

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## REGULATIONS

calcium chloride (CAS: 10043-52-4) is found on the following regulatory lists;  
Canada Domestic Substances List (DSL)  
US EPA High Production Volume Chemicals Additional List  
US Toxic Substances Control Act (TSCA)

magnesium chloride (CAS: 7786-30-3) is found on the following regulatory lists;  
Canada Domestic Substances List (DSL)  
US - Minnesota Hazardous Substance List  
US Toxic Substances Control Act (TSCA)

magnesium chloride (CAS: 7791-18-6) is found on the following regulatory lists;  
Canada Domestic Substances List (DSL)  
US - Minnesota Hazardous Substance List  
US Toxic Substances Control Act (TSCA)

No regulations applicable

sodium chloride (CAS: 7647-14-5) is found on the following regulatory lists;  
Canada Domestic Substances List (DSL)  
US Toxic Substances Control Act (TSCA)

water (CAS: 7732-18-5) is found on the following regulatory lists;  
Canada Domestic Substances List (DSL)  
US Toxic Substances Control Act (TSCA)

No data available for Aloes, extract as CAS: 85507-69-3, CAS: 94349-62-9.

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## Section 16 - OTHER INFORMATION

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### LIMITED EVIDENCE

Cumulative effects may result following exposure\*.

\* (limited evidence).

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