



## MATERIAL SAFETY DATA SHEET

### 1. Product name / chemical identification

Electrochemical sensor to detect Carbon Monoxide (CO)

### 2. Composition / information on ingredients

Electrolyte containing sulphuric acid (H<sub>2</sub>SO<sub>4</sub>), filter material and proprietary catalyst alloy electrodes enclosed in a plastic based housing with attached metal connections.

### 3. Hazards identification

The electrolyte inside the sensor constitutes the main potential hazard. This may leak out should the housing be damaged or tampered with.

#### 3.1 Inhalation of electrolyte:

Inhalation is not an expected hazard unless heated to high temperatures. Mist or vapor inhalation can cause irritation to the nose, throat, and upper respiratory tract.

#### 3.2 Ingestion of electrolyte:

Corrosive. May cause sore throat, abdominal pain, nausea and severe burns of the mouth, throat, and stomach.

#### 3.3 Skin or eye contact of electrolyte:

Corrosive. May cause redness pain, blurred vision, and eye burns.

#### 3.4 Aggravation of pre-existing conditions:

Persons with pre-existing skin disorders or eye problems, or impaired respiratory function may be more susceptible to the effects of the substance.

### 4. First-Aid Measures:

In case of leakage and:

#### 4.1 Eye contact with electrolyte:

Irrigate thoroughly with water for at least 15 minutes. Obtain medical advice.

#### 4.2 Inhalation of electrolyte:

Remove to fresh air. Rest and keep warm. Obtain medical advice if applicable.

#### 4.3 Skin contact with electrolyte:

Immediately flush the skin thoroughly with water for at least 15 minutes.

Remove contaminated clothing and wash before re-use. Obtain medical advice if continued irritation.

#### 4.4 Ingestion of electrolyte:

If swallowed DO NOT INDUCE VOMITING. Wash out mouth thoroughly with water and give plenty of water to drink. Obtain medical advice.

200 Mason Circle, Suite A, Concord, CA 94520  
Phone: 925/270.3971 Fax: 925/270.3973 www.nyad.com

## **5. Fire Fighting Measure:**

### **5.1 Fire:**

Not considered to be a fire hazard.

### **5.2 Explosion:**

Not considered to be an explosion hazard.

### **5.3 Fire extinguishing media:**

Use any means suitable for extinguishing surrounding fire.

## **6. Accidental release measures:**

### **6.1 Damage:**

Should any CO sensor be so severely damaged or tampered with that the leakage of the contents occurs, then the following procedures should be adopted:

- Avoid skin contact with any liquid or internal component through the use of protective gloves
- Disconnect CO cell if it is attached to any equipment.
- Use copious amounts of clean water to wash away any spilt electrolyte, particularly important in equipment because of the corrosive nature of the electrolyte.
- Observe first aid measures in case of eye contact, inhalation, skin contact or ingestion of electrolyte.

## **7. Handling and Storage:**

Must not be exposed to temperatures outside the range specified on the specification sheet. Should not be exposed to organic vapors, which may cause physical damage to the body of the sensor. Must not be stored in areas containing organic solvents or in flammable liquid stores.

## **8. Exposure controls / personal protection:**

None in normal operation.

## **9. Physical and chemical properties:**

Sensor is a sealed unit.

## **10. Stability and reactivity:**

N/A

## **11. Toxicological information:**

Electrolyte is corrosive to eyes, respiratory system and skin.

**12. Ecological information:**

Very toxic to aquatic organisms. Harmful effect due to PH shift. Toxic effect on fish and algae.

**13. Disposal considerations:**

Contains toxic compounds irrespective of physical condition. Should be disposed of according to local waste management requirements and environmental legislation. Should not be burnt since they may evolve toxic fumes.

**14. Transport regulations:**

Electrochemical gas sensors are classed as non-dangerous and may be transported without special packing, labels, etc. It is important, however, to check any local regulations.

**15. Regulatory Information:****R-Phrases: 35**

Causes severe burns.

**S-Phrases: 26-30-45**

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Never add water to this product. In case of accident, or if you feel unwell, seek medical advice immediately.

**R-Phrases: 37-36-50-53**

Irritating to respiratory system. Irritating to eyes. Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

**S-Phrases:**

Do not discharge into drains or the environment.

**16. Revision History:**

Issue 1 New Issue