

PSDS

12.1

Product Safety Datasheet

These products are classified as Articles under REACH and are not subject to the requirements for Information in the Supply Chain (Safety Data Sheets and Labels). While sensors may release hazardous substances if damaged, this is not an intended release as defined under REACH. Sensors are not classified as hazardous under the CLP.

1. Product Name / Chemical Identification

Electrochemical sensors with internal filter to detect Carbon Monoxide (CO).

Manufacturer: TECNOSENS S.P.A.
Telephone: +39 030.3534144
Fax: +39 030.3530815
Website: <http://www.tecnosens.it>

2. Composition / Information on Ingredients

Electrolyte containing sulphuric acid (H₂SO₄), filter material, proprietary catalyst electrodes, enclosed in a plastic based housing with attached metal connections.

3. Hazards Identification

Tecnosens electrochemical gas sensors in normal usage represent no chemical hazard in the sense of the "Control of Substances Hazardous to Health (COSHH) Regulations" and the "Health and Safety at Work Act 1974." The electrolyte inside the sensor constitutes the main potential hazard. This may leak out should the the housing be damaged or tampered with.

3.1. Inhalation of electrolyte:

Inhalation is not an expected hazard unless heated to high temperatures (greater than 50 °C). Mist or vapour 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 immediate 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 immediate medical advice.

5. **Fire Fighting Measures**

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 electrochemical cell 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 electrochemical 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 as mentioned above 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 vapours, 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 (relevant if sensor becomes damaged)

Harmful effect on 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

Tecnosens electrochemical sensors are classified as “batteries wet non-spillable” (UN2800). They are transported as per IATA PI 872 and 49CFR 173.159a, and need no special packaging, labels etc. as they are not restricted as per IATA Special Provision A67.

15. Regulatory Information (relevant if sensor becomes damaged)

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 you feel unwell, seek medical advice immediately.

WARRANTY/REMEDY

Tecnosens warrants goods of its manufacture as being free of defective materials and faulty workmanship during the applicable warranty period. Tecnosens's standard product warranty applies unless agreed to otherwise by Tecnosens in writing; please refer to your order acknowledgment or consult your local sales office for specific warranty details. If warranted goods are returned to Tecnosens during the period of coverage, Tecnosens will repair or replace, at its option, without charge those items that Tecnosens, in its sole discretion, finds defective. **The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Tecnosens be liable for consequential, special, or indirect damages.**

While Tecnosens may provide application assistance personally, through our literature and the Tecnosens web site, it is buyer's sole responsibility to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this writing. However, Tecnosens assumes no responsibility for its use.