

Material Safety Data Sheet

1 PRODUCT IDENTIFICATION

Product name	:	Electrochemical Gas Sensor
Product codes	:	Acid/, Alc/, C2H4/, CH2O/, CO/, COCl2/, CS2/, Cl2/, ClO2/, ETO/, H2/, H2O2/, H2S/, HCN/, HCl/, HF/, NH3/, NO/, NO2/, O2/, O3/, OX/, PH3/, SO2/, SiH4/, VOC/
Manufacturer	:	MEMBRAPOR AG, Birkenweg 2, 8304 Wallisellen, Switzerland
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2 HAZARD IDENTIFICATION

These sensors are not considered a chemical hazard in normal use.

Should the housing be damaged, the electrolyte inside the sensor may leak out. Exposure to the sensor electrolyte (acid) is the only component that may potentially prove hazardous to health.

3 COMPOSITION

- Electrolyte containing sulfuric acid (H_2SO_4), approx. 1 milliliter, approx. 40%
CAS-No.: 7664-93-9
Classification: H290, H314
- Noble metals like platinum
- Activated carbon (C)
- Polytetrafluoroethylene (PTFE)
- Glass fiber
- Housing made of polycarbonate
- Filter containing potassium permanganate (K_2MnO_4)

4 FIRST AID MEASURES

In case of leakage and

Inhalation of electrolyte:

If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

Skin contact with electrolyte:

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a physician.

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Eye contact with electrolyte:

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Swallowing electrolyte:

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5 FIRE FIGHTING MEASURES

Fire:	Not considered to be a fire hazard.
Explosion:	Not considered to be an explosion hazard.
Fire extinguishing media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

6 ACCIDENTAL RELEASE MEASURES

- Avoid skin contact with any liquid or internal component through the use of protective gloves.
- Disconnect the sensor 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

- Sensor must not be exposed to temperature, humidity and pressure outside the range quoted in the individual sensor data sheet.
- Sensor should not be exposed to organic vapor, which may cause physical damage to the body of the sensor.
- Sensor must be stored in original packaging between 0 and 25 °C and below 90% RH.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

None in normal operation.

9 PHYSICAL AND CHEMICAL PROPERTIES

Sensor is a sealed unit.

10 STABILITY AND REACTIVITY

Stable under recommended storage conditions.

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11 TOXICOLOGICAL INFORMATION

Acute toxicity of electrolyte

LD50 Oral - rat - 2140 mg/kg (25% solution)

LC50 Inhalation - rat - 2 h - 510 mg/m³

Irritation and corrosion of electrolyte

Skin - rabbit - Extremely corrosive and destructive to tissue.

Eyes - rabbit - Severe eye irritation.

12 ECOLOGICAL INFORMATION

Toxicity of electrolyte to fish LC50 - *Gambusia affinis* (Mosquito fish) - 42 mg/l - 96 h

13 DISPOSAL CONSIDERATIONS

Contains toxic compounds irrespective of physical condition.

At the end of the product's life, do not dispose of any electrochemical sensor, but contact MEMBRAPOR for disposal instructions.

Sensors should not be burnt since they may evolve toxic fumes.

14 TRANSPORT INFORMATION

Electrochemical gas sensors are classified as non-dangerous and may be transported without special packaging or labeling. Although, you are advised to check any local regulations.

15 REGULATORY INFORMATION

GHS Labeling according to EC directive.

16 OTHER INFORMATION

Full test of H-Statements referred to under section 3

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. MEMBRAPOR AG, shall not be held liable for any damage resulting from handling or from contact with the above product.