

PSDS

SENSORIC ORGANIC ELECTROLYTE

Product Safety Datasheet

1. Product Name / Chemical Identification

Electrochemical sensors for detection of toxic gas.

AsH3 2E 1	F2 3E 1	NH3 3E 1000	PH3 3E 5 F LT*
AsH3 3E 1 F LT*	H2S 2E 30	NH3 3E 100 LT	PH3 3E 5 LT
AsH3 3E 1 LT	H2S 3E 30	NH3 3E 250 LT	SeH2 3E 5 LT
B2H6 3E 1 LT	HCN 2E 30 F*	NH3 3E 1000 LT	SiH4 3E 50 LT
ClO2 3E 1 O	HCN 3E 30 F*	O3 3E 1 F	SiH4 3E 50
ClO2 3E 1	N2H4 2E 1	O3 3E 1	TBM 2E 50
COCl2 3E 1	NH3 3E 100		

*These sensors are equipped with a lead containing filter. Please consider specific hazards listed below.

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2. Composition / Information on Ingredients

PPO (Noryl) plastic housings, proprietary noble metal catalyst electrodes, halogen free organic solvents, traces of inorganic and organic non-toxic salts. H₂S-filtered sensors marked with an asterisk after product name in the list above: additionally glass wool filter impregnated with lead acetate.

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.

Relevant for H₂S-filtered sensors (indicated by an asterisk after product name, see above): Ingestion or direct skin contact with the lead acetate containing filter should be avoided. Wear neoprene or polyethylene gloves, safety goggles and clothing to protect skin.

3.1. Electrolyte

3.1.1 Inhalation of electrolyte:

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

3.1.2 Ingestion of electrolyte:

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

3.1.3. Skin or eye contact of electrolyte:

May cause skin irritation.

3.1.4. Aggravation of pre-existing conditions – Electrolyte:

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

3.2. Lead acetate filter - only relevant for H₂S-filtered sensors

(indicated by asterisk)

3.2.1 Hazards – Lead acetate filter:

Exposure can cause brain damage. May cause damage to blood-forming, nervous, urinary and reproductive systems. Systems of exposure include loss of appetite, metallic taste in the mouth, anxiety, constipation, nausea, pallor, excessive tiredness, weakness, insomnia, headache, nervous irritability, muscle and joint soreness, tremors, dizziness and abdominal pain.

3.2.2. Skin or eye contact – Lead acetate filter:

May cause skin irritation.

3.2.3. Aggravation of pre-existing conditions – Lead acetate filter:

Exposure is more likely to cause a problem for those suffering from diseases of the bloodforming, nervous, urinary and reproductive systems. Exposure to lead may result in injury to a developing fetus.

4. First-Aid Measures

4.1. In case of leakage and:

4.1.1. Eye contact with electrolyte:

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

4.1.2. Inhalation of electrolyte:

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

4.1.3. 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.

4.1.4. Ingestion of electrolyte:

If swallowed DO NOT INDUCE VOMITING. Wash out mouth thoroughly with water and 1.give plenty of water to drink. Obtain medical advice.

4.2. In case of physical damage and:

4.2.1. Eye contact with lead acetate H₂S-filter of *-marked sensors:

Irrigate thoroughly with water. Obtain medical advice.

4.2.2. Inhalation of lead acetate, fumes or dust from H₂S-filter of *-marked sensors:

Remove to fresh air. Obtain medical advice.

4.2.3. Skin contact with lead acetate H₂S-filter of *-marked sensors:

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.

4.2.4. Ingestion of lead acetate H₂S-filter of *-marked sensors:

If swallowed and individual is conscious, induce vomiting. Obtain medical attention.

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 Sensoric gas 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 Sensoric gas 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

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

- Colour coded sensors in plastic housing with connection pins or flying leads
- Sensor is a sealed unit

10. Stability and Reactivity

- Ignition temperature: 445°C
- Insoluble in water

11. Toxicological Information

To the best manufacturer's knowledge, the toxicological properties have not been thoroughly investigated.

12. Ecological Information

Harmful effect on aquatic organisms. 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

Sensoric gas 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

Hazard Statements

H290

May be corrosive to metals.

H302 + H312

Harmful if swallowed or in contact with skin.

H314

Causes severe skin burns and eye damage.

H412

Harmful to aquatic life with long lasting effects.

Precautionary statement

P273

Avoid release to the environment.

P280

Wear protective gloves/ protective clothing/ eye protection/ face protection

P305 + P351 + P338

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

P310

Immediately call a POISON CENTER or doctor/ physician.

The following hazard and precautionary statements are exclusive to the sensors equipped with lead acetate filter – (indicated by an asterisk in the product list of section 1, p. 1):

Hazard Statements

H360Df

May damage the unborn child. Suspected of damaging fertility.

H373

May cause damage to organs through prolonged or repeated exposure.

H410

Very toxic to aquatic life with long lasting effects.

Precautionary statement

P201

Obtain special instructions before use.

P273

Avoid release to the environment.

P308 + P313

If exposed or concerned: Get medical advice/ attention.

P501

Dispose of contents/ container to an approved waste disposal plant.

WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship during the applicable warranty period. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgment or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items that Honeywell, 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 Honeywell be liable for consequential, special, or indirect damages.**

While Honeywell may provide application assistance personally, through our literature and the Honeywell 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, Honeywell assumes no responsibility for its use.

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