



SAFETY DATA SHEET

29 CFR 1910.1200 OSHA Hazard

Communication Rule Format

Chem-Tel 24 Hour Emergency # 1-800-255-3924

MINE SAFETY APPLIANCES COMPANY

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PRODUCT IDENTITY

LABEL IDENTITY- MSA P/N 10047966 AMMONIA SENSOR

USED IN AN ULTIMA X SENSOR: A-ULTX-54-X-X

SENSOR: NH3 3E 1000

A Safety Data Sheet for sensors as furnished by Sensoric Gas Sensors is attached

WARNING: This is a hazardous chemical product. By following the directions and warnings provided with this product, the hazards associated with the use of this product can be greatly reduced but never entirely eliminated. Mine Safety Appliances Company makes no warranties, expressed or implied, with respect to this product and EXPRESSLY DISCLAIMS THE WARRANTY OF MERCHANTABILITY AND ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. Users assume all risks in handling, using or storing this product.

Product Safety Data Sheet

1. PRODUCT IDENTIFICATION:

Electrochemical gas sensors containing **ORGANIC** electrolyte

Product names:

AsH3 2E 1
AsH3 3E 1 F LT
AsH3 3E1 LT
AsH3 3E1
B2H6 3E 1 LT
ClO2 3E 1 O
ClO2 3E 1
COCl2 3E 1
F2 3E 1
H2S 2E 30
H2S 3E 30
HCN 2E 30 F
HCN 3E 30 F
N2H4 2E 1 LT
N2H4 2E 1
NH3 3E 100
NH3 3E 1000
O3 3E 1 F
O3 3E 1
PH3 3E 5 F LT
PH3 3E 5 LT
SeH2 3E 5 LT
SiH4 3E 50 LT
SiH4 3E 50
TBM 2E 50

MANUFACTURER:

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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

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 vapour inhalation can cause irritation to the nose, throat, and upper respiratory tract.

3.2. Ingestion of electrolyte:

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

3.3. Skin or eye contact of electrolyte:

May cause skin irritation.

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 soap and copios amounts of 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. Never give anything by mouth to unconscious persons. Obtain medical advice.

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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:

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 vapours, 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.

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11. TOXICOLOGICAL INFORMATION:

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

12. 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.

13. TRANSPORT REGULATIONS

Sensoric gas sensors are classified under UN 2800 (batteries - Wet non-spillable) and conform to the special provisions, section 4.5 paragraph A67 of the dangerous goods regulations. As such Sensoric 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.

14. REGULATORY INFORMATION:

Non applicable

Sensoric deems the data contained herein as factual, and the opinions expressed are those of qualified experts based on the results of tests conducted. The above data can not be used as a warranty provision or representation for which Sensoric assumes legal responsibility. The data are offered solely for consideration, investigation and verification. Any use of this information is subject to federal, state and local laws and regulations.