

## Product Safety Data Sheet

### Electrochemical gas sensors containing acid electrolyte

1. Product Identification			
Electrochemical gas sensors containing acid electrolyte			
Part No.	Substance / Sensor	MST Sensor Part-No.	MSTox Sensor Part-No
	CO (Carbon Monoxide)	9602-5400	9001-5400
	DCE (Dichloroethylene 1,2)	9602-9600	
	ETO (Ethylene Oxide)	9602-8000	
	H <sub>2</sub> (Hydrogen)	9602-5100 9602-5101	9001-5100 9011-5100 9011-5101
	H <sub>2</sub> S (Hydrogen Sulfide)	9602-5200	
	HBr (Hydrogen Bromide)	9602-7000	9001-5200
	HCl (Hydrogen Chloride)	9602-5800	
	NO (Nitric Oxide)	9602-7200	9011-5800
	NO <sub>2</sub> (Nitrogen Dioxide)	9602-7300	9011-7200
	SO <sub>2</sub> (Sulfur Dioxide)	9602-5900	
	TEOS (Tetraethyl Orthosilicate)	9602-7500	
	TMB (Trimethyl Borate)	9602-7510	9001-7500
	TMP (Trimethyl Phosphite)	9602-7800	
Manufacturer	MST Technology GmbH Elsenheimerstrasse 43 80687 München Germany Phone: +49 (0)897 919 250 Fax: +49 (0)897 919 253 e-mail: ha_munich@honeywell.com web: www.honeywellanalytics.com		
2. Composition / Information on Ingredients			
ABS plastic housings, proprietary noble metal catalyst electrodes, acid electrolytes: sulfuric acid [CAS 7664-93-9] or phosphoric acid [CAS 7664-38-2].			
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	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.		
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 MST Technology gas sensor be so severely damaged or tampered with that the leakage of the contents occurs then the following procedures should be adopted:			
<ul style="list-style-type: none"> <li>• Avoid skin contact with any liquid or internal component through the use of protective gloves.</li> <li>• Disconnect MST Technology gas sensor if it is attached to any equipment.</li> <li>• Use copious amounts of clean water to wash away any spilt electrolyte, particularly important in equipment because of the corrosive nature of the electrolyte.</li> <li>• Observe first aid measures in case of eye contact, inhalation, skin contact or ingestion of electrolyte.</li> </ul>			

## 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

Non applicable.

## 11. Toxicological Information

Electrolyte is corrosive to eyes, respiratory system and skin.

## 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

MST Technology 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 MST Technology 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.

### Find out more

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Part No: 2004G5002

01/12

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