

**1. Identification of the Substance/Preparation and of the Company**

MSDS Nr.	024	
Product name	Oxygen Sensor	Pt. No.66066
	Oxygen Cell	Pt. No.12357
	Sealed %O2 Sensor C/S	Pt. No.62027
	Oxygen Sensor	Pt. No.66066
	Oxygen Cell 70X-V	Pt. No.65015
Intended Use	Electrochemical sensors for gas detection	
Company	Gas Measurement Instruments Ltd Inchinnan Estate Renfrew PA4 9RG	
Emergency phone number	0141 812 3211	

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**2. Composition/Information on Ingredients**

Substance/Preparation	Preparation
Components/Impurities	Electrolyte containing potassium acetate gel, lead, proprietary catalyst alloy electrodes, enclosed in a metal can housing with attached metal connections. After a short period of use, lead acetate will develop inside the sensor.
EEC Nr. (from EINECS)	Not applicable for preparations.

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**3. Hazards Identification**

Hazards Identification	<p>The electrolyte and the lead inside the sensor constitute the main potential hazards, and these may become exposed should the housing be damaged.</p> <p>Electrolyte (will contain lead acetate)</p> <p><i>Inhalation of electrolyte:</i> 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.</p> <p><i>Ingestion of electrolyte:</i> May cause irritation of the mouth, throat, and stomach.</p> <p><i>Skin or eye contact of electrolyte:</i> May cause redness, pain, blurred vision, and eye burns.</p> <p><i>Aggravation of pre-existing conditions -Electrolyte:</i> Persons with pre-existing skin disorders or eye problems, or impaired respiratory function may be more susceptible to the effects of the substance. Lead Acetate may cause harm to the unborn child and a possible risk of impaired fertility. Danger of cumulative effects.</p> <p>Lead</p> <p><i>Hazards- Lead:</i> Exposure can cause brain damage. May cause damage to blood-forming, nervous, urinary and reproductive systems. Symptoms 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.</p> <p><i>Aggravation of pre-existing conditions -Lead:</i> Exposure is more likely to cause a problem for those suffering from diseases of the</p>
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blood-forming, nervous, urinary and reproductive systems.  
Exposure to lead may result in injury to a developing foetus.

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**4 First Aid Measures**

Inhalation	<i>Electrolyte:</i> Remove to fresh air. Obtain medical advice. <i>Lead:</i> Remove to fresh air. Obtain medical advice.
Ingestion	<i>Electrolyte:</i> If swallowed DO NOT INDUCE VOMITING. Wash out mouth thoroughly with water and give plenty of water to drink. Obtain medical advice. <i>Lead:</i> If swallowed and individual is conscious, induce vomiting. Obtain medical attention.
Eye Contact	<i>Electrolyte:</i> Irrigate thoroughly with water for at least 15 minutes. Obtain medical advice. <i>Lead:</i> Irrigate thoroughly with water. Obtain medical advice.
Skin Contact	<i>Electrolyte:</i> 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. <i>Lead:</i> 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.

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**5. Fire Fighting Measures**

Specific Hazards	Not considered to be a fire or explosion hazard.
Hazardous combustion products.	May evolve toxic fumes.
Suitable extinguishing media	Use any means suitable for extinguishing surrounding fire.
Specific methods	N/A
Special protective equipment for fire fighters	N/A

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**6. Accidental Release Measures.**

Personal precautions	Should any 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 lead, liquid or internal component through the use of protective gloves.  Disconnect sensor if it is attached to any equipment.  Observe first aid measures in case of eye contact, inhalation, skin contact or ingestion of electrolyte or lead.
Environmental precautions	N/A
Clean up methods	Use copious amounts of clean water to wash away any spilt electrolyte, particularly important in equipment because of the corrosive nature of the electrolyte.

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**7. Handling and Storage**

Handling and storage	Must not be exposed to temperatures outside the range specified on the data 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
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**8. Exposure Controls / Personal Protection**

Personal protection	None in normal operation
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**9. Physical and Chemical Properties.**

Appearance / Colour	Sensor is a sealed unit. Plastic sensor with 2 metal pins, or metal can sensor with 2 solder tags.
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**10. Stability and Reactivity**

Stability and reactivity	N/A
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**11. Toxicological Information**

General	Electrolyte is corrosive to eyes, respiratory system and skin.
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**12. Ecological Information**

General	No ecological damage caused by this product.
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**13. Disposal Considerations.**

General	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.
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**14. Transport Information**

UN Nr.	2800
Other transport information	Electrochemical 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 electrochemical sensors are classed as non-dangerous and may be transported without special packing, labels etc. It is important, however, to check any local regulations

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**15. Regulatory Information**

Number in Annex 1 of Dir. 67/548	Not applicable for preparations.
EC Classification	Not classified as a dangerous substance.

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**16. Other Information**

This product should only be used for the calibration of GMI instruments using the procedures laid out in the instrument manual.

Details given in this document are believed to be correct at the time of going to press. Whilst proper care has been taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted.

**17. Revision History**

Version 1.0	1 January 2001	C.G.Tandy
Version 2.0	31 July 2002	C.G.Tandy
Version 3.0	06 August 2009	C.G.Tandy
Version 4.0	14 October 2010	C.G.Tandy