Material Safety Data Sheet

Section I – Product Identification

Product Name:	Carbon Monoxide Sensor, Class F-1R, F-1RH and F-2
Manufacturer:	Teledyne Electronic Technologies/Analytical Instruments
Address:	16830 Chestnut Street, City of Industry, CA 91748
Phone:	(626) 934-1500
Technical Support:	(626) 934-1673
Environment, Health and Safety:	(626) 934-1592
Date Prepared :	10/01/98

Section II – Physical and Chemical Data

Composition

Chemical and Common Names:	Sulfuric Acid (H_2SO_4), 17% w/w *
	Silica (SiO_2), 50% w/w
CAS Number:	H_2SO_4 7664–93–9
	SiO_2 7631–86–9

Character of Individual Components

	H_2SO_4 (>90%)	**SiO_2** (pure)
Melting Point/Range:	3 °C	1700 °C
Boiling Point/Range:	290 °C	N/A
Specific Gravity:	1.84	2.2
pH:	<1	N/A
Solubility in Water:	Completely soluble	Insoluble
Percent Volatiles by Volume:	None	N/A
Appearance and Odor:	Colorless, odorless solution	white crystalline powder

* The sensor contains no fluid. The sulfuric acid is completely absorbed by the silica substrate.

Section III – Physical Hazards

Potential for fire and explosion: The electrolyte in carbon monoxide sensors is not flammable. There are no fire or explosion hazards associated with carbon monoxide sensors.

Potential for reactivity: The sensors are stable under normal conditions of use. Avoid contact between the sensor electrolyte and strong acids, strong bases, strong oxidizers, and strong reducers.

Section IV – Health Hazard Data

Primary route of entry:	Ingestion, eye/skin contact
Exposure limits: OSHA PEL:	N/A
ACGIH TLV:	1 mg/cu.m. (H_2SO_4) 10 mg/cu.m. (Total dust) 5 mg/cu.m. respirable dust (SiO_2)
Effects of overexposure	
Ingestion:	The electrolyte could be harmful or fatal if swallowed. Oral LD50 (RAT) = 2433 mg/kg
Eye:	The electrolyte is corrosive; eye contact could result in permanent loss of vision.
Dermal:	The electrolyte is corrosive; skin contact could result in a chemical burn.
Inhalation:	Liquid inhalation is unlikely.
Signs/symptoms of exposure:	Contact with skin or eyes will cause a burning sensation.
Medical conditions aggravated by exposure:	None
Carcinogenicity:	NTP Annual Report on Carcinogens: Not listed LARC Monographs: Not listed OSHA: Not listed
Other health hazards:	None

Section V – Emergency and First Aid Procedures

Eye Contact: Flush eyes with water for at least 15 minutes and get immediate medical attention.

Skin Contact: Wash affected area with plenty of water and remove contaminated clothing. If burning persists, seek medical attention.

Ingestion: Give plenty of cold water. Do not induce vomiting. Seek medical attention. Do not administer liquids to an unconscious person.

Inhalation: Solid inhalation is unlikely.

Section VI – Handling Information

NOTE: The sensors are sealed, and under normal circumstances, the contents of the sensors do not present a health hazard. The following information is given as a guide in the event that a cell leaks.

Protective clothing: Rubber gloves, chemical splash goggles.

Clean-up procedures: Wipe down the area several times with a wet paper towel. Use a fresh towel each time.

Protective measures during cell replacement: Before opening the bag containing the sensor cell, check the sensor cell for leakage. If the sensor cell leaks, do not open the bag. If there is liquid around the cell while in the instrument, put on gloves and eye protection before removing the cell.

Disposal: Should be in accordance with all applicable state, local and federal regulations.

NOTE: The above information is derived from the MSDS provided by the suppliers. The information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Teledyne Electronic Technologies/ Analytical Instruments shall not be held liable for any damage resulting from handling or from contact with the above product.