

50004-x



# MATERIAL SAFETY DATA SHEET

## SECTION 1 - PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTIFIER <b>Hydrogen Sulfide Calibration Gas Ampoule</b>		PRODUCT IDENTIFICATION NUMBER (PIN) <b>50004-x, 50008-x</b>	
PRODUCT USE <b>Calibration Gas</b>			
MANUFACTURER'S NAME <b>General Monitors</b>		SUPPLIER'S NAME <b>General Monitors</b>	
STREET ADDRESS <b>26776 Simpatica Circle</b>		STREET ADDRESS <b>26776 Simpatica Circle</b>	
CITY <b>Lake Forest</b>	PROVINCE <b>California</b>	CITY <b>Lake Forest</b>	PROVINCE <b>California</b>
POSTAL CODE <b>92630</b>	EMERGENCY TELEPHONE NO. <b>949/581-4464</b>	POSTAL CODE <b>92630</b>	EMERGENCY TELEPHONE NO. <b>949/581-4464</b>

## SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	%	CAS NUMBER	LD <sub>50</sub> OF INGREDIENT (SPECIFY SPECIES & ROUTE)	LC <sub>50</sub> OF INGREDIENT (SPECIFY SPECIES)
Hydrogen Sulfide	<0.5%	7783-06-4		

## SECTION 3 - PHYSICAL DATA

PHYSICAL STATE <b>Gas</b>		ODOR AND APPEARANCE <b>Rotten eggs - clear</b>		ODOR THRESHOLD (ppm) <b>&lt;1 ppm</b>	
VAPOR PRESSURE (mmHg)	VAPOR DENSITY (AIR-1) <b>1.250</b>	EVAPORATION RATE	BOILING POINT (C) <b>-195.8°C</b>	FREEZING POINT (C) <b>-210°C</b>	
pH <b>slightly acetic</b>		SPECIFIC GRAVITY <b>0.97</b>		COEFF. WATER/OIL, DIST.	

## SECTION 4 - FIRE AND EXPLOSION DATA

FLAMMABILITY YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF YES, UNDER WHICH CONDITIONS?		
MEANS OF EXTINCTION		
FLASHPOINT (C) AND METHOD	UPPER FLAMMABLE LIMIT (% BY VOLUME)	LOWER FLAMMABLE LIMIT (% BY VOLUME)
AUTOIGNITION TEMPERATURE (C)	HAZARDOUS COMBUSTION PRODUCTS	
EXPLOSION DATA	SENSITIVITY TO IMPACT	SENSITIVITY TO STATIC DISCHARGE

## SECTION 5 - REACTIVITY DATA

CHEMICAL STABILITY YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF NO, UNDER WHICH CONDITIONS?	
INCOMPABILITY WITH OTHER SUBSTANCES YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF SO, WHICH ONES? <b>Concentrated Nitric acid, Chlorine, Nitrogen Trifluoride, Oxygen difluoride or other strong oxidizing agents</b>	
REACTIVITY, AND UNDER WHAT CONDITIONS <b>Contact and heat</b>	
HAZARDOUS DECOMPOSITION PRODUCTS <b>Oxides of sulfur</b>	

PRODUCT IDENTIFIER  
Hydrogen Sulfide Calibration Gas Ampoule

### SECTION 6 - TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY  
SKIN CONTACT  SKIN ABSORPTION  EYE CONTACT  INHALATION  INGESTION

EFFECTS OF ACUTE EXPOSURE TO PRODUCT  
No effect with levels present in ampoules given ampoule volume

EFFECTS OF CHRONIC EXPOSURE TO PRODUCT  
Low levels for extended periods cause irritation of mucous membranes, conjunctivae of the eyes, headaches

EXPOSURE LIMITS TWA 10 molar ppm	IRRITANCY OF PRODUCT None	SENSITIZATION TO PRODUCT None	CARCINOGENICITY None
TERATOGENICITY None	REPRODUCTIVE TOXICITY None	MUTAGENICITY None	SYNERGESTIC PRODUCTS None

### SECTION 7 - PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT  
Use ampoules in well ventilated areas

GLOVES (SPECIFY) No	RESPIRATOR (SPECIFY) No	EYE (SPECIFY) No
FOOTWEAR (SPECIFY) No	CLOTHING (SPECIFY) No	OTHER (SPECIFY) None

ENGINEERING CONTROLS (SPECIFY, e.g. VENTILATION, ENCLOSED PROCESS)  
None

LEAK AND SPILL PROCEDURE  
If a large quantity of ampoules break at once, ventilate area.

WASTE DISPOSAL  
No special method - dispose of glass in trash.

HANDLING PROCEDURES AND EQUIPMENT  
Ampoules are made of glass. Do not break in hands.

STORAGE REQUIREMENTS  
Keep out of heat or direct sunlight - could shorten life of ampoule.

SPECIAL INFORMATION  
Pack so ampoules are not crushed or broken.

### SECTION 8 - FIRST AID MEASURES

SPECIFIC MEASURES

### SECTION 9 - TRANSPORTATION INFORMATION

DESCRIPTION OF GOODS:  
Based on the concentration of the H<sub>2</sub>S and the fact that the ampoules are not under pressure they are not subject to Hazardous Materials Regulations. (49 CFR Parts 171-180)

PASSENGER AND CARGO AIRCRAFT:  
Acceptable for shipment

### SECTION 10 - PREPARATION DATE OF MSDS

PREPARED BY (GROUP, DEPARTMENT, ETC.) Safety Officer	PHONE NUMBER 949 / 581-4464	DATE 16 Sept 2009
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