

MATERIAL SAFETY DATA SHEET**SECTION 1 - PRODUCT IDENTIFICATION AND USE**

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| PRODUCT IDENTIFIER Carbon Monoxide Calibration Gas Ampoule | | PRODUCT IDENTIFICATION NUMBER (PIN) 60012-x, 60011-x | |
| PRODUCT USE Calibration Gas | | | |
| MANUFACTURER'S NAME General Monitors | | SUPPLIER'S NAME General Monitors | |
| STREET ADDRESS 26776 Simpatica Circle | | STREET ADDRESS 26776 Simpatica Circle | |
| CITY Lake Forest | PROVINCE California | CITY Lake Forest | PROVINCE California |
| POSTAL CODE 92630 | EMERGENCY TELEPHONE NO. 949/581-4464 | POSTAL CODE 92630 | EMERGENCY TELEPHONE NO. 949/581-4464 |

SECTION 2 - HAZARDOUS INGREDIENTS

| HAZARDOUS INGREDIENTS | % | CAS NUMBER | LD ₅₀ OF INGREDIENT (SPECIFY SPECIES & ROUTE) | LC ₅₀ OF INGREDIENT (SPECIFY SPECIES) |
|------------------------|-----------------|------------------|--|--|
| Carbon Monoxide | <0.5% | 630-08-0 | LC 50, 1807 ppm/4H (rat) | |
| Nitrogen | >95% | 7727-37-9 | Simple Asphyxiant | |
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SECTION 3 - PHYSICAL DATA

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| PHYSICAL STATE Gas | | ODOR AND APPEARANCE Odorless - clear | | ODOR THRESHOLD (ppm) N/A |
| VAPOR PRESSURE (mmHg) | VAPOR DENSITY (AIR-1) Not Available | EVAPORATION RATE | BOILING POINT (C) Not Available | FREEZING POINT (C) Not Available |
| pH Not Available | SPECIFIC GRAVITY Not Available | | COEFF, WATER/OIL, DIST. | |

SECTION 4 - FIRE AND EXPLOSION DATA

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|---|-------------------------------------|-------------------------------------|
| FLAMMABILITY YES 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

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|---|--|
| CHEMICAL STABILITY YES <input checked="" type="checkbox"/> NO IF NO, UNDER WHICH CONDITIONS? | |
| INCOMPABILITY WITH OTHER SUBSTANCES YES NO <input checked="" type="checkbox"/> IF SO, WHICH ONES? | |
| REACTIVITY, AND UNDER WHAT CONDITIONS None Known | |
| HAZARDOUS DECOMPOSITION PRODUCTS Carbon Dioxide | |

PRODUCT IDENTIFIER

Carbon Monoxide 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 dizziness, nausea, & headaches

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|-------------------------------|-------------------------------|----------------------------------|------------------------------|
| EXPOSURE LIMITS TWA 50 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 - PREPARATION DATE OF MSDS

| | | |
|---|--------------------------------|------------------------|
| PREPARED BY (GROUP, DEPARTMENT, ETC.) Safety Officer | PHONE NUMBER 949 / 581-4464 | DATE 15 August 2000 |
|---|--------------------------------|------------------------|