

ITEM: 33V740 - Gas Monitor Bump Gas 10L Quad Mix

PICK REQ: 1265388156

SAFETY DATA SHEET (SDS)

SDS: D2214

This SDS should be attached or kept with the respective product with which it is associated.

MSDS - D2214

Associated Grainger Item: 33V740 - Gas Monitor Bump Gas 10L Quad Mix

GASCO(R*)
MATERIAL SAFETY DATA SHEET
CALIBRATION CHECK GAS

PRODUCT NAME:
METHANE (0- 2.5%), CARBON MONOXIDE (0.0005- 1.0%), HYDROGEN SULFIDE (0.001- 0.025%), SULFUR DIOXIDE (0.001 - 0.025%), OXYGEN (0.0015- 23.5%), BALANCE NITROGEN

MSDS NO: 401SO2
VERSION: 3
DATE: SEPTEMBER, 2014

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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PRODUCT NAME: MULTI-MIX
CHEMICAL NAME:
METHANE, CARBON MONOXIDE, HYDROGEN SULFIDE, SULFUR DIOXIDE, OXYGEN IN NITROGEN

COMMON NAMES/SYNONYMS: NONE
TDG (CANADA) CLASSIFICATION: 2.2
WHIMIS CLASSIFICATION: A

2. COMPOSITION/INFORMATION ON INGREDIENTS

| INGREDIENT | %VOLUME | PEL-OSHA | TLV-ACGIH | LD50 OR LC50 ROUTE/SPECIES |
|----------------------------------|------------------------|-------------------|-------------------|----------------------------|
| METHANE FORMULA: CH4 | 0 TO 2.5% SIMPLE | SIMPLE ASPHYXIATE | N/A ASPHYXIATE | |
| CARBON MONOXIDE FORMULA: CO | 0.0005 TO 1.0% | 50 PPM | 25 PPM | 1811 PPM/4 HOURS (RAT) |
| HYDROGEN SULFIDE FORMULA: H2S | 0.001 TO 0.025% | 20 PPM | 10 PPM | 444 PPM (RAT) |
| SULFUR DIOXIDE FORMULA: SO2 | 0.001 TO 0.025% | 20 PPM | 10 PPM | 444 PPM (RAT) |
| OXYGEN FORMULA: O2 | 0.0015 TO 23.5% N/A | N/A | N/A | |
| NITROGEN FORMULA: N2 | BALANCE | SIMPLE ASPHYXIATE | SIMPLE ASPHYXIATE | N/A |

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:
THIS PRODUCT IS A COLORLESS GAS, WHICH HAS A ROTTEN-EGG ODOR. THE ODOR CANNOT BE RELIED ON AS AN ADEQUATE WARNING OF THE PRESENCE OF THIS PRODUCT, BECAUSE OLFACTORY FATIGUE OCCURS AFTER OVER-EXPOSURE TO HYDROGEN SULFIDE. HYDROGEN SULFIDE AND CARBON MONOXIDE ARE TOXIC TO HUMANS IN RELATIVELY LOW CONCENTRATIONS. OVER-EXPOSURE CAN CAUSE SKIN OR EYE IRRITATION, NAUSEA, DIZZINESS, HEADACHES, COLLAPSE, UNCONSCIOUSNESS, COMA, AND DEATH.

ROUTE OF ENTRY:
SKIN CONTACT: YES
SKIN ABSORPTION: NO
EYE CONTACT: YES
INHALATION: YES
INGESTION: NO

HEALTH EFFECTS:
EXPOSURE LIMITS: YES
IRRITANT: YES
SENSITIZATION: NO
REPRODUCTIVE HAZARD: YES
MUTAGEN: NO

CARCINOGENICITY:
NTP: NO
IARC: NO
OSHA: NO

EYE EFFECTS:
HYDROGEN SULFIDE CAN CAUSE EYES TO BECOME SCRATCHY, IRRITATED AND EVEN TEARY. ABOVE 50 PPM OF HYDROGEN SULFIDE, THERE IS AN INTENSE TEARING BLURRING OF VISION, AND PAIN WHEN LOOKING AT LIGHT.

SKIN EFFECTS:
OVER-EXPOSURE TO CARBON MONOXIDE CAN BE INDICATED BY THE LIPS AND FINGERNAILS TURNING BRIGHT RED. HIGH CONCENTRATIONS OF HYDROGEN SULFIDE

MAY ALSO BE IRRITATING TO THE SKIN.

INGESTION EFFECTS: INGESTION UNLIKELY. GAS AT ROOM TEMPERATURE.

INHALATION EFFECTS:
DUE TO THE SMALL SIZE OF THIS CYLINDER, NO UNUSUAL HEATH EFFECTS FROM OVER-EXPOSURE ARE ANTICIPATED UNDER ROUTINE CIRCUMSTANCES OF USE. OVER-EXPOSURE TO HYDROGEN SULFIDE CAN CAUSE DIZZINESS, HEADACHE, AND NAUSEA. AT 12-16% OXYGEN, BREATHING AND PULSE RATE IS INCREASED, MUSCULAR COORDINATION IS SLIGHTLY DISTURBED.

NFPA HAZARD CODES:
HEALTH 3
FLAMMABILITY 0
REACTIVITY 0

HMS HAZARD CODES:
HEALTH 3
FLAMMABILITY 0
REACTIVITY 0

RATING SYSTEM:
0=NO HAZARD
1=SLIGHT HAZARD
2=MODERATE HAZARD
3=SERIOUS HAZARD
4=SEVERE HAZARD

4. FIRST AID MEASURES

EYES:
PERSONS WITH POTENTIAL EXPOSURE SHOULD NOT WEAR CONTACT LENSES. FLUSH CONTAMINATED EYES WITH COPIOUS QUANTITIES OF WATER. PART EYELIDS TO ASSURE COMPLETE FLUSHING. CONTINUE FOR A MINIMUM OF 15 MINUTES. SEEK IMMEDIATE MEDICAL ATTENTION.

SKIN:
REMOVE CONTAMINATED CLOTHING AS RAPIDLY AS POSSIBLE. FLUSH AFFECTED AREA WITH COPIOUS QUANTITIES OF WATER. SEEK IMMEDIATE MEDICAL ATTENTION.

INGESTION: NOT REQUIRED

INHALATION:
PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES OF OVEREXPOSURE. RESCUE PERSONNEL SHOULD BE EQUIPPED THE SELF-CONTAINED BREATHING APPARATUS. VICTIMS SHOULD BE ASSISTED TO AN UNCONTAMINATED AREA AND INHALE FRESH AIR. QUICK REMOVAL FROM THE CONTAMINATED AREA IS MOST IMPORTANT. IF BREATHING HAS STOPPED ADMINISTER ARTIFICIAL RESUSCITATION AND SUPPLEMENTAL OXYGEN. FURTHER TREATMENT SHOULD BE SYMPTOMATIC AND SUPPORTIVE.

5. FIRE-FIGHTING MEASURES

THESE CONTAINERS HOLD GAS UNDER PRESSURE, WITH NO LIQUID PHASE. IF INVOLVED IN A MAJOR FIRE, THEY SHOULD BE SPRAYED WITH WATER TO AVOID PRESSURE INCREASES, OTHERWISE PRESSURES WILL RISE AND ULTIMATELY THEY MAY DISTORT OR BURST TO RELEASE THE CONTENTS. THE GASES WILL NOT ADD SIGNIFICANTLY TO THE FIRE, BUT CONTAINERS OR FRAGMENTS MAY BE PROJECTED CONSIDERABLE DISTANCES - THEREBY HAMPERING FIRE FIGHTING EFFORTS.

6. ACCIDENTAL RELEASE MEASURES

IN TERMS OF WEIGHT, THESE CONTAINERS HOLD VERY LITTLE CONTENTS, SUCH THAT ANY ACCIDENTAL RELEASE BY PUNCTURING ETC. WILL BE OF NO PRACTICAL CONCERN.

7. HANDLING AND STORAGE

SUCK BACK OF WATER INTO THE CONTAINER MUST BE PREVENTED. DO NOT ALLOW BACKFEED INTO THE CONTAINER. USE ONLY PROPERLY SPECIFIED EQUIPMENT WHICH IS SUITABLE FOR THIS PRODUCT, ITS SUPPLY PRESSURE AND TEMPERATURE. USE ONLY IN WELL-VENTILATED AREAS. DO NOT HEAT CYLINDER BY ANY MEANS TO INCREASE RATE OF PRODUCT FROM THE CYLINDER. DO NOT ALLOW THE TEMPERATURE WHERE CYLINDERS ARE STORED TO EXCEED 130 DEG. F (54 DEG. C).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

USE ADEQUATE VENTILATION FOR EXTENDED USE OF GAS.

9. PHYSICAL AND CHEMICAL PROPERTIES

| PARAMETER | VALUE |
|---------------------|--------------------------------------|
| PHYSICAL STATE | GAS |
| EVAPORATION POINT | N/A |
| PH | N/A |
| ODOR AND APPEARANCE | COLORLESS GAS WITH A ROTTEN-EGG ODOR |

10. STABILITY AND REACTIVITY

STABLE UNDER NORMAL CONDITIONS. EXPECTED SHELF LIFE 15 MONTHS.

11. TOXICOLOGICAL INFORMATION

THIS GAS MIXTURE CONTAINS COMPONENTS THAT MAY CAUSE EMBRYOTOXIC EFFECTS IN HUMANS; HOWEVER, DUE TO THE SMALL SIZE OF THE CYLINDER NO TOXICOLOGICAL DAMAGE IS ANTICIPATED.

12. ECOLOGICAL INFORMATION

NO ECOLOGICAL DAMAGE CAUSED BY THIS PRODUCT.

13. DISPOSAL INFORMATION

DO NOT DISCHARGE INTO ANY PLACE WHERE ITS ACCUMULATION COULD BE DANGEROUS. USED CONTAINERS ARE ACCEPTABLE FOR DISPOSAL IN THE NORMAL WASTE STREAM AS LONG AS THE CYLINDER IS EMPTY AND VALVE REMOVED OR CYLINDER WALL IS PUNCTURED; BUT GASCO ENCOURAGES THE CONSUMER TO RETURN CYLINDERS.

14. TRANSPORT INFORMATION

| | UNITED STATES DOT | CANADA TDG |
|-----------------------|---|---|
| PROPER SHIPPING NAME | COMPRESSED GAS N.O.S. (OXYGEN, NITROGEN) | COMPRESSED GAS N.O.S. (OXYGEN, NITROGEN) |
| HAZARD CLASS | 2.2 | 2.2 |
| IDENTIFICATION NUMBER | UN1956 | UN1956 |
| SHIPPING LABEL | NONFLAMMABLE GAS | NONFLAMMABLE GAS |

15. REGULATORY INFORMATION

THE COMPONENTS OF THIS PRODUCT ARE LISTED UNDER THE ACCIDENT PREVENTION PROVISIONS OF SECTION 112(R) OF THE CLEAN AIR ACT (CAA) WITH A THRESHOLD QUANTITY (TQ) OF 10,000 POUNDS EACH.

TOXIC SUBSTANCE CONTROL ACT (TSCA):
ALL INGREDIENTS ARE ON THE TSCA INVENTORY OR ARE NOT REQUIRED TO BE LISTED ON THE TSCA INVENTORY.

16. OTHER INFORMATION

THIS MSDS HAS BEEN PREPARED IN ACCORDANCE WITH THE CHEMICALS (HAZARD INFORMATION AND PACKAGING FOR SUPPLY (AMENDMENT) REGULATION 1996. THE INFORMATION IS BASED ON THE BEST KNOWLEDGE OF GASCO, AND ITS ADVISORS AND IS GIVEN IN GOOD FAITH, BUT WE CANNOT GUARANTEE ITS ACCURACY, RELIABILITY OR COMPLETENESS AND THEREFORE DISCLAIM ANY LIABILITY FOR LOSS OR DAMAGE ARISING OUT OF USE OF THIS DATA. SINCE CONDITIONS OF USE ARE OUTSIDE THE CONTROL OF THE COMPANY AND ITS ADVISORS WE DISCLAIM ANY LIABILITY FOR LOSS OR DAMAGE WHEN THE PRODUCT IS USED FOR OTHER PURPOSES THAN IT IS INTENDED.

MSDS/S010/401/SEPTEMBER, 2014