Product ID:CALIBRATING GAS MIXTURE MSDS Date:01/01/1995 FSC:6830 NIIN:00-460-7704 Status Code:A MSDS Number: CJZVP === Responsible Party === **Company Name: AGA GAS INC** Address:6225 OAKTREE BLVD City:CLEVELAND State:OH ZIP:44131 Country:US Info Phone Num:216-642-6600 Emergency Phone Num:216-642-6600 Resp. Party Other MSDS Num.:48 Preparer's Name:NOT PROVIDED. CAGE:0KPC9 === Contractor Identification === **Company Name: AGA GAS INC** Address:6225 OAKTREE BLVD Box:94737 City:CLEVELAND State:OH ZIP:44101-4737 Country:US Phone:216-642-6600 CAGE:0KPC9 Company Name: AGA GAS INC Address:6055 ROCKSIDE WOODS BLVD Box:94737 City:CLEVELAND State:OH ZIP:44131-2329 Country:US Phone:216-642-6652 Contract Num:SP0450-99-M-JB29 CAGE:1E6A1

Ingred Na

me:CARBON MONOXIDE CAS:630-08-0 RTECS #:FG3500000 Fraction by Wt: 40-50% PPM Other REC Limits:NOT PROVIDED. OSHA PEL:55 MG/M3;50 PPM ACGIH TLV:29 MG/M3;25 PPM

Ingred Name:CARBON DIOXIDE CAS:124-38-9 RTECS #:FF6400000 Minumum % Wt:1.2 Maxumum % Wt:1.5 Other REC Limits:NOT PROVIDED. OSHA PEL:9000 MG/M3;5000 PPM ACGIH TLV:9000 MG/M3;5000 PPM ACGIH STEL:54000 MG/M3

Ingred Name:HYDROGEN CAS:1333-74-0 RTECS #:MW8900000 Minumum % Wt:1. Maxumum % Wt:1.2 Other REC Limits:NOT PROVIDED. OSHA PEL:NO LISTI NG ACGIH TLV:NO LISTING

Ingred Name:OXYGEN CAS:7782-44-7 RTECS #:RS2060000 Minumum % Wt:20. Maxumum % Wt:22. Other REC Limits:NOT PROVIDED. OSHA PEL:NONE LISTED ACGIH TLV:NONE LISTED

Ingred Name:NITROGEN CAS:7727-37-9 RTECS #:QW9700000 Fraction by Wt: BALANCE Other REC Limits:NOT PROVIDED. OSHA PEL:NONE LISTED ACGIH TLV:NONE LISTED

LD50 LC50 Mixture:NOT PROVIDED. Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO Report

s of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic:NOT PROVIDED FOR THE MIXTURE. HMIS: INHALATION OF COMPRESSED AIR MAY CAUSE DECOMPRESSION SICKNESS. SYMPTOMS MAY INCLUDE: HEADACHE, VOMITING, VISUAL DEFECTS, DEAFNESS. Explanation of Carcinogenicity:NONE Effects of Overexposure:NOT PROVIDED FOR THE MIXTURE. HMIS: INHALATION OF COMPRESSED AIR MAY CAUSE DECOMPRESSION SICKNESS. SYMPTOMS MAY INCLUDE: HEADACHE, VOMITING, VISUAL DEFECTS, DEAFNESS. Medical Co
nd Aggravated by Exposure:NOT PROVIDED.
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First Aid:NOT PROVIDED FOR THE MIXTURE. AIR IS ESSENTIAL FOR LIFE. IF ILL EFFECTS OCCUR, REMOVE TO FRESH AIR AND CALL A PHYSICIAN.
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Extinguishing Media:NONFLAMMABLE GAS. Fire Fighting Procedures:IF CYLINDERS ARE INVOLVED IN A FIRE, SAFELY RELOCATE OR KEEP COOL WITH WATER SPRAY. Unusual Fire/Explosion Hazard:NO NE
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Spill Release Procedures: EVACUATE ALL PERSONNEL FROM AFFECTED AREA. USE APPROPRIATE PROTECTIVE EQUIPMENT. IF LEAK IS IN CONTAINER OR CONTAINER VALVE, CONTACT YOUR CLOSEST SUPPLIER LOCATION OR CALL THE EMERGENCY TELEPHONE NUM BER LISTED ON MSDS. Neutralizing Agent:NOT RELEVANT.
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Handling and Storage Precautions:STORE IN A COOL, DRY, WELL VENTIL ATED AREA AWAY FROM HEAVILY TRAFFICKED AREAS AND EMERGENCY EXITS DO

AREA, AWAY FROM HEAVILY TRAFFICKED AREAS AND EMERGENCY EXITS. DO NOT ALLOW THE TEMPERATURE WHERE CYLINDERS ARE STORED TO EXCEED 125F (52C). CYLINDERS SHOULD BE ST ORED UPRIGHT AND FIRMLY SECURED. Other Precautions:USE IN WELL-VENTILATED AREAS. VALVE PROTECTION CAPS MUST BE IN PLACE UNLESS CYLINDER IS SECURED WITH VALVE OUTLET PIPED TO USE POINT. DO NOT DRAG, SLIDE OR ROLL CYLINDERS. USE A SUITABLE HAND TRUCK FO R CYLINDER MOVEMENT. USE A PRESSURE REDUCING REGULAT OR WHEN CONNECTING CYLINDER TO LOWER PRESSURE.

Respiratory Protection:NOT PROVIDED FOR MIXTURE. HMIS: NONE REQUIRED. Ventilation:ADEQUATE Protective Gloves:ANY MATERIAL Eye Protection:SAFETY GOGGLES OR GLASSES Other Protective Equipment:SAFETY SHOES. Work Hygienic Practices:NOT PROVIDED. Supplemental Safety and Health THE CONTRACTOR PROVIDED ONE MSDS FOR EACH GAS (CARBON MONOXIDE, CARBON DIOXIDE, HYDROGE, OXYGEN AND NITROG EN). THE PRODUCT ID AND PERCENTAGES ARE TAKEN FROM THE CONTRACTING TECHNICAL DATA FILE (CTDF).

HCC:G3 NRC/State Lic Num:NOT RELEVANT. Boiling Pt:=-195.8C, -320.5F **B.P. Text:FOR NITROGEN** Melt/Freeze Pt:=-209.9C, -345.9F M.P/F.P Text:FOR NITROGEN Decomp Temp:Decomp Text:NOT PROVIDED. Vapor Pres:NOT PROVIDED. Vapor Density:0.97 (N2) Spec Gravity:0.0725 LB/FT3 pH:NOT RELEVANT. Viscosity:NOT RELEVANT. **Evaporation Rate & amp** ; Reference:N/A (GAS) Solubility in Water: VERY SLIGHTY (N2) Appearance and Odor:COLORLESS, ODORLESS GAS. Percent Volatiles by Volume:100 (GAS) Corrosion Rate:NOT RELEVANT.

Stability Indicator/Materials to Avoid:YES NONE Stability Condition to Avoid:NONE (FOR NITROGEN) Hazardous Decomposition Products:NONE

Toxicological Information:NOT PROVIDED.

Ecological:NOT PROVIDED.

Waste Disposal Methods:DO NOT ATTEMPT TO DISPOSE OF WASTE OR UNUSED QUANTITIES. RETURN IN THE SHIPPING CONTAINER PROPERLY LABELED, WITH ANY VALVE OUTLET PLUGS OR CAPS SECURED AND VALVE PROTECTION CAP IN PLACE TO YOUR SUPPLI ER. FOR EMERGENCY DISPOSAL ASSISTANCE, CONTACT YOUR CLOSEST SUPPLIER LOCATION OR CALL THE EMERGNCY T ELEPHON

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NUMBER LISTED ON MSDS.

Transport Information:NOT PROVIDED FOR THE MIXTURE.

SARA Title III Information:NOT PROVIDED FOR THE MIXTURE. Federal Regulatory Information:NOT PROVIDED FOR THE MIXTURE. State Regulatory Information:NOT PROVIDED FOR THE MIXTURE.

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