AIRGAS INC -- NON-FLAMMABLE GAS MIXTURE -- 6665-01-214-8247

Product ID:NON-FLAMMABLE GAS MIXTURE MSDS Date:04/22/2001 FSC:6665 NIIN:01-214-8247 Status Code:A MSDS Number: CLCVT === Responsible Party === **Company Name: AIRGAS INC** Address:259 RADNOR-CHESTER RD SUITE 100 City:RADNOR State:PA ZIP:19087-5240 Country:US Info Phone Num:1-610-687-5253 **Emergency Phone Nu** m:800-949-7937 Resp. Party Other MSDS Num.: DOCUMENT NUMBER: 002103 CAGE:UO451 === Contractor Identification === **Company Name: AIRGAS INC** Address:259 RADNOR-CHESTER RD SUITE 100 Box:City:RADNOR State:PA ZIP:19087-5240 Country:US Phone:1-610-687-5253 CAGE:UO451 Company Name: KAMPI COMPONENTS CO., INC. Address:210 RT 13 Box:721 City:BRISTOL State:PA ZIP:19007-3517 Country:US Phone:215-736-2000 Contract Num:SP0440-00-M-JA63 CAGE:7Z016

======= Composition/Information on Ingredients =========

Ingred Name: ISOBUTYLENE CAS:115-11-7 RTECS #:UD0890000 Fraction by Wt: 1PPM-1.7% Ingred Name: AIR (CAS# 7727-37-9, NITROGEN 79% AND CAS# 7782-44-7, OXYGEN 21%) CAS:25635-88-5 Fraction by Wt: BALANCE Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic: ACUTE: THE MOST SIGNIFICANT HAZARD ASSOCIATED WITH COMPRESSED AIR IS THE PRESSURE HAZARD. CONTACT WITH RAPIDLY EXPANDING GASES (WHICH ARE RELEASED UNDER HIGH PRESSURE) MAY CAUSE FROSTBITE. SYMPTOMS OF FROSTBITE INCLUDE CHANGE IN SKIN COLOR TO WHITE OR GRAYISH-YELLOW. THE PAIN AFTER CONTACT WITH LIQUID CAN QUICKLY SUBSIDE. CHRONIC: NO KNOWN ADVERSE HEALTH EFFECTS ASSOCIATED WITH CHRONIC EXPOSURE T O THIS GAS. TARGET ORGANS: RESPIRATORY SYSTEM, UNDER AMBIENT LOWPRESSURE AND CENTRAL NERVOUS SYSTEM UNDER AMBIENT HIGH PRESSURE CONDITIONS. CHRONIC: NONE EXPECTED. Explanation of Carcinogenicity:NO COMPONENT OF THIS GAS MIXTURE IS FOUND ON THE FOLLOWING LISTS: FEDERAL OSHA Z LIST, NTP, IARC, CAL/OSHA, AND THEREFORE IS NEITHER CONSIDERED TO BE NOR SUSPECTED TO BE A CANCER-CAUSING AGENT BY THES E AGENCIES. Effects of Overexposure: INHALATION: THIS PRODUCT IS NON-TOXIC. AIR, THE MAIN COMPONENT OF THIS PRODUCT, IS NECESSARY FOR LIFE. Medical Cond Aggravated by Exposure: ACUTE OR CHRONIC RESPIRATORY CONDITIONS, AS WELL AS DISORDERS INVOLVING THE "TARGET ORGANS" MAY **BE AGGR** AVATED BY OVEREXPOSURE TO THE COMPONENTS OF THIS PRODUCT.

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First Aid:RESCUERS SHOULD NOT ATTEMPT TO RETRIEVE VICTIMS OF EXPOSURE TO THIS PRODUCT WITHOUT ADEQUATE PERSONAL PROTECTIVE EQUIPMENT. AT A MINIMUM, SELF-CONTAINED BREATHING APPARATUS EQUIPMENT SHOULD BE WORN. VICTIMS) MUST BE TAKEN FOR MEDICAL ATTENTION. RESCUERS SHOULD BE TAKEN FOR MEDICAL ATTENTION, IF NECESSARY. TAKE COPY OF LABEL AND MSDS TO P HYDICIAN OR OTHER HEALTH PROFESSIONAL WITH VICTIM. REMOVE VI CTIMS TO FRESH AIR. EYE CONTACT: FLUSH EYES WITH WATER FOR AT LEAST 15 MINUTES. IF NOT BREATHING, GIVE (CONTD. SEE OTHER INFORMATION)

Flash Point:NA Autoignition Temp: Autoignition Temp Text: NA Lower Limits:NA Upper Limits:NA Extinguishing Media:NON-FLAMMABLE GAS. USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE. Fire Fighting Procedures:STR UCTURAL FIREFIGHTERS MUST WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE EQUIPMENT. MOVE FIRE-EXPOSED CYLINDERS FROM AREA, IF POSSIBLE WITHOUT RISK TO FIRE-FIGHTERS. WITHDRAW IMMEDIATE LY IN CASE OF RISING SOUNDS FROM VENTING PRESSURE RELIEF DEVICES OR ANY DISCOLORATION OF TANKS OR CYLINDERS DUE TO FIRE. Unusual Fire/Explosion Hazard: WHEN INVOLVED IN A FIRE, THIS MATERIAL MAY IGNITE AND PRODUCE TOXIC GASES, INCLUDING CARBON MONOXIDE AND CARBON DIOXIDE. AD DITIONAL, WHEN INVOLVED IN FIRE, THE CYLINDERS MAY RUPTURE. NOT EXPLOSION SEN SITIVE TO MECHANICAL IMPACT OR TO STATIC DISCHARGE.

Spill Release Procedures:UNCONTROLLED RELEASES SHOULD BE COVERED BY TRAINED PERSONNEL USING PRE-PLANNED PROCEDURES. PROPER PROTECTIVE EQUIPMENT SHOULD BE USED. MINIMUM PERSONAL PROTECTIVE EQUIPMENT SHOULD BE LEVEL D: SAFETY G LASSES, MECHANICALLY-RESISTANT GLOVES. LEVEL B,

WHICH INCLUDES USE OF SCABA, SHOULD BE WORN WHEN OXYGEN IS BELOW 19.5% OR UNKNOWN. STOP RELEASE OF LEAKING GAS. IF NOT (CONTD. SEE "WASTE DISPOSAL")

Handling and Storage Precautions:STORE IN COOL(,< 125F), DRY, WELL-VENTILATED, FIREPROOF AREA AWAY FROM FLAMMABLE OR COMBUSTIBLE MATERIALS AND CORROSIVE ATMOSPHERE. STORE AWAY FROM HEAT, IGNITION SOURCES,AND OUT OF DIRECT SUNLIGHT. S TORE CYLINDERS UPRIGHT AND FIRMLY SECURED FROM FALLING. MOVE CYLINDERS WITH SUITABLE HAND-TRUCK.

Other Precautions:DO NOT DRAG, ROLL, DROP, STRIKE EACH OTHER. DO NOT HEAT CYLINDER OR USE OILS OR GREASE ON GAS-HANDLING FITTINGS OR EQUIPMENT. USE DESIGNATED CGA FITTINGS. DO NOT USE ADAPTERS. USE CHECK VALVE OR TRAP IN DISCHARGE LINE.

Respiratory Protection:MAINTAIN OXYGEN LEVELS ABOVE 19.5%.USE PROTECTION AUTHORIZED IN OSHA STANDA

RD 29 CFR 1910.134, APPLICABLE

STATE REGULATIONS, OR CANADIAN CSA STANDARD Z94,4-93. OXYGEN LEVELS BELOW 19.5% ARE CONSIDERED IDLH BY OSHA. IN SUCH ATMOAPHERES USE A FULL-FACEPIECE PRESSURE/DEMAND SCABA OR FULL FACEPIECE,SUPPLIED AIR RESPIRATOR WITH AUXILIARY SELF-CONTAINED AIR SUPPLY.

Ventilation: USE WITH ADEQUATE VENTILATION.

Protective Gloves:WEAR MECHANICALLY-RESISTANT GLOVES WHEN HANDLING CYLINDERS.

Eye Protection:SPLASH GOGGLES , SAFETY GLASSES OR FACE-SHIELD.. Other Pro

tective Equipment:USE BODY PROTECTION APPROPRIATE FOR TASK. IF A HAZARD OF INJURY TO THE FEET EXISTS, ALSO USE FOOT PROTECTION AS DESCRIBED IN U.S. OSHA 29 CFR.

Work Hygienic Practices: DO NOT EAT OR DIRNK WHILE HANDLING CHEMICALS. Supplemental Safety and Health

HCC:G3 Boiling Pt:=-194.3C, -317.7F Melt/Freeze Pt:=-216.2C, -357.2F Vapor Density:1 Spec Gravity:SPECIFIC VOL=13.3 FT3/LB Solubility in Water:1.40% (V/V) Appe arance and Odor:COLORLESS, ODORLESS GAS.

Stability Indicator/Materials to Avoid:YES

AIR IS NOT COMPATIBLE WITH FUELS, IN THAT AIR WILL SUPPORT COMBUSTION. ISOBUTYLENE COMPONENT OF THIS MIXTURE IS INCOMPATILE WITH STRONG OXIDIZERS (E.G., CHLORINE, BROMINE PENTAFLUORIDE, OXYGEN, OXYGEN DIFLUORIDE AND NITROGE Stability Condition to Avoid:NORMALLY STABLE. CONTACT WITH INCOMPATIBLE MATERIALS AND EXPOSURE TO HEAT, SP ARKS, SOURCES OF IGNITION. CYLINDERS EXPOSED TO HIGH TEMPERATURES OR DIRECT FLAME CAN RUPTURE OR BURST.

Hazardous Decomposition Products:NONE KNOWN. Conditions to Avoid Polymerization:WILL NOT OCCUR.

Toxicological Information:FOLLOWING DATA ARE FOR COMPONENTS OF MIXTURE AT LEVEL GREATER THAN 1 MOLE %. ISOBUTYLENE: LC50 (RAT, INHALATION): 620 G/M3/ 4 HOURS; LC50 (MOUSE, INHALATION): 415 G/M3/ 2 HOUR. ISOBUTYL

ENE IS NOT FOUN D ON FEDERAL OSHA Z LIST, NTP,

IARC, CAL/OSHA, AND IS NEITHER CONSIDERED TO BE NOR SUSPECTED TO BE A CANCER-CAUSING AGENT BY THESE AGENCIES. CONTACT WITH RAPIDLY EXPANDING GASES CAN CAUSE FROSTBITE TO EXPOSED SKIN AND EYES. NO COMPONENT IS A SKIN OR RESPIRATORY SENSITIZER.PRODUCT IS NOT REPORTED TO CAUSE MUTAGENIC EFFECTS, NO EMBRYOTOXIC EFFECTS, NO TERATOGENIC EFFECTS, NO REPRODUCTIVE EFFECTS IN HUMANS.

================= Ecological Information ==

Ecological:ENVIRONMENTAL STABILITY: THIS GAS WILL BE DISSIPATED RAPIDLY IN WELL-VENTILATED AREAS. EFFECTS OF MATERIAL ON PLANTS OR ANIMALS: NO ADVERSE EFFECT IS ANTICIPATED TO OCCUR TO PLANT LIFE, EXCEPT FOR FRO ST PRODUCED IN THE PRESENCE OF RAPIDLY EXPANDING GASES. EFFECT OF CHEMICAL ON AQUATIC LIFE: NO EVIDENCE OF AN ADVERSE EFFECT OF THIS PRODUCT ON AQUATIC LIFE IS CURRENTLY AVAILABLE.

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Waste Disposal Methods:WASTE DISPOSAL MUST BE IN ACCORDANCE WITH APPROPRIATE FEDERAL, STATE, AND LOCAL REGULATIONS. RETURN CYLINDERS WITH ANY RESIDUAL PRODUCT TO AIRGAS INC. DO NOT DISPOSE OF LOCALLY. (CONTD. FROM "SPILL RE LEASE") ABLE TO STOP RELEASE, ALLOW GAS TO RELEASE IN PLACE OR REMOVE TO A SAFE AREA AND ALLOW GAS T O RELEASE THERE.

Transport Information: THIS MATERIAL IS HAZARDOUS AS DEFINED BY

49 CFR

172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION. PROPER SHIPPING NAME: COMPRESSED GASES, N.O.S. (AIR, ISOBUTYLENE); CLASS 2.2 (COMPRESSED GAS); UN 1956 ; DOT LABEL REQUIRED: COMPRESSED GAS; NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2000): 126. CANADA: THIS GAS MIXTURE IS CONSIDERED AS DANGEROUS GOODS, PER REGULATIONS OF TRANSPORT CANADA. USE THE ABOVE INFORMATION FOR THE PREPARATION OF CANADIAN SHIPMENTS.

====== Regulatory Informa

SARA Title III Information:THE COMPONENTS OF THIS GAS MIXTURE ARE NOT SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 302, 304, AND 313 OF TITLE I I I OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT. U.S. SARA THRESHOLD PL ANNING QUANTITY:THERE ARE NO SPECIFIC THRESHOLD PLANNING QUANTITIES FOR THIS MATERIAL. THE DEFAULT FEDERAL MSDS SUBMISSION AND INVENTORY REQUIREMENT FILING THRESHOLD OF 10,000 LB (4,540KG) MAY APPLY, PER 40 CFR 370.20.

U.S. CERCLA

REPORTABLE QUANTITY (RQ): NOT APPLICIABLE.

Federal Regulatory Information: THE COMPONENTS OF THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY. OTHER U.S. FEDERAL REGULATIONS: NOT APPLICABLE. CANADIAN REGULATIONS: CANADIAN INVENTORY: COMPONENTS OF THIS PRODUCT ARE LISTED ON THE DSL INVENTORY. CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: COMPONENTS OF THIS PRODUCT ARE NOT ON THE CEPA PRIOROITIES SUBSTANCES LISTS. CANADIAN WHMIS: CL

ASS A: COMPRESSE D GASES.

State Regulatory Information:CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): NO COMPONENT OF THIS PRODUCT IS ON THE CALIFORNIA PROPOSITION 65 LISTS. PRODUCT COVERED UNDER FOLLOWING STATE REGULATIONS: FL :SUBSTANCE LIST, ISOBUTYLENET; MN: LIST OF HAZARDOUS SUBSTANCES, ISOBUTYLENE; NJ: RIGHT TO KNOW HAZARDOUS SUBSTANCE LIST, ISOBUTYLENE; PA: HAZARDOUS SUBSTANCE LIST, ISOBUTYLENE.

====== Other Information

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