

AIR PRODUCTS AND CHEMICALS INC. -- OXYGEN, COMPRESSED -- 1660-01-138-8623

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Product Identification
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Product ID:OXYGEN, COMPRESSED

MSDS Date:01/01/1995

FSC:1660

NIIN:01-138-8623

Status Code:A

MSDS Number: CJKDL

=== Responsible Party ===

Company Name:AIR PRODUCTS AND CHEMICALS INC.

Address:7201 HAMILTON BLVD

City:ALLENTOWN

State:PA

ZIP:18195-1501

Country:US

Info Phone Num:800-752-1597; 800

-345-3148

Emergency Phone Num:US/800-523-9374/OUT-US:810-481-7711

Resp. Party Other MSDS Num.:1012

CAGE:00742

=== Contractor Identification ===

Company Name:AIR PRODUCTS AND CHEMICALS INC

Address:7201 HAMILTON BLVD

Box:City:ALLENTOWN

State:PA

ZIP:18195-1501

Country:US

Phone:800-345-3148/ 800-752-1597

CAGE:00742

Company Name:CONAX FLORIDA CORP

Address:2801 75TH STREET N

Box:City:SAINT PETERSBURG

State:FL

ZIP:33710-2936

Country:US

Phone:813-345-8000

Contract Num:SP0920-99-M-1045

CAGE:62323

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Composition/Information on Ingredients
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Ingred Name:OXYGEN
CAS:7782-44-7
RTECS #:RS2060000
> Wt:99.

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Hazards Identification
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Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:TARGET ORGANS: EYES, CENTRAL NERVOUS
SYSTEM. INHALATION: BREATHING 80% OR MORE OXYGEN AT ATMOSPHERIC
PRESSURE FOR MORE THAN A FEW HOURS MAY CAUSE BREATH
ING DIFFICULTY.

BREATHING OXYGEN AT HIGHER PRE SSURE INCREASES THE LIKEIHOOD OF
ADVERSE EFFECTS WITHIN A SHORTER TIME PERIOD. BREATHING PURE OXYGEN
UNDER PRESSURE MAY CAUSE LUNG DAMAGE & ALSO CENTRAL NERVOUS SYSTEM
EFFECTS. BREATHING OXYGEN UNDER PRESSURE MAY CAUSE PROLONGATION OF
ADAPTATION TO DARKNESS & REDUCED PERIPHERAL VISION. EYE/SKIN
CONTACT: NO ADVERSE EFFECT. AIRWAY OBSTRUCTION DURING HIGH CONC.
MAY CAUSE ALVEOLAR COLLAPSE & OCCLUSIO N OF THE EUSTACHIAN TU
BES.

Effects of Overexposure:INHALATION: BREATHING 80% OR MORE OXYGEN AT
ATMOSPHERIC PRESSURE FOR MORE THAN A FEW HOURS MAY CAUSE NASAL
STUFFINESS, COUGH, SORE THROAT, CHEST PAIN & BREATHING DIFFICULTY.
BREATHING PURE OXYGEN UNDE R PRESSURE MAY CAUSE DIZZINESS, POOR
COORDINATION, TINGLING SENSATION, VISUAL & HEARING DISTURBANCES,
MUSCULAR TWITCHING, UNCONSCIOUSNESS & CONVULSIONS. OBSTRUCTION OF
HTE PARANASAL SINUSES MAY PRODUC T 'VACUUM-TYPE' HEADACHE.

Medical Cond Aggrav
ated by Exposure:CHRONIC OBSTRUCTIVE PULMONARY
DISEASE.

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First Aid Measures
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First Aid:INHALATION: MOVE VICTIM TO FRESH AIR OR IF IN ELEVATED
PRESSURES REDUCE OXYGEN PRESSURES TO 1 ATMOSPHERE. CALL A PHYSICIAN
& ADVISE THEM THAT THE VICTIM HAS BEEN EXPOSED TO A HIGH
CONCENTRATION OF OXY GEN. EYE/SKIN CONTACT: NOT APPLICABLE. NOTES
TO PHYSICIAN: ADMINISTRATION OF CERTAIN DRUGS, INCLUDING
PHENOTHIAZINE DRUGS & CHLOROQUINE.

VITAMIN 'E' DEFICIENCY MAY
INCREASE SUSCEPTIBILITY TO OXYGEN TOXICITY.

===== Fire Fighting Measures =====

Lower Limits:NONFLAMMABLE

Upper Limits:NONFLAMMABLE

Extinguishing Media:OXYGEN IS NONFLAMMABLE BUT WILL SUPPORT COMBUSTION.
USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.

Fire Fighting Procedures:EVACUATE ALL PERSONNEL FROM THE DANGER AREA.
IF POSSIBLE, SHUT OFF FLOW OF OXYGEN WHICH IS SUPPORTING THE FIRE.
IMMEDIATELY COOL CONTAINERS

WITH WATER SPRAY FROM MAXIMUM DISTANCE.

WHEN COOL MOVE CYLINDERS FROM FIRE AREA, IF POSSIBLE WITHOUT RISK.
SELF CONTAINED BREATHING APPARATUS MAY BE REQUIRED FOR RESCUE
WORKERS.

Unusual Fire/Explosion Hazard:OXYGEN VIGOROUSLY ACCELERATES COMBUSTION.
MATERIALS WHICH ARE NONCOMBUSTIBLE IN AIR WILL BURN IN PRESENCE OF
OXYGEN ATMOSPHERE(OVER23%). FIRE RESISTANT CLOTHING MAY BURN & OFFER
NO PROTECTION IN OXYGEN RICH ATMOSPHERES. OXYGEN MAY FORM
EXPLOSIVE COMPOUNDS WHEN EXPOSED TO COMBUSTIBLES OR OIL, GREASE, & OTHER

HYDROCARBON MATERIALS.

===== Accidental Release Measures =====

Spill Release Procedures:EVACUATE ALL PERSONNEL FROM EFFECTED AREA.
SHUT OFF SOURCE OF OXYGEN IF POSSIBLE. INCREASE VENTILATION TO
RELEASE AREA. PERSONNEL EXPOSED TO HIGH CONC. OF OXYGEN SHOULD STAY
IN A WELL-VENTILATED AREA FOR 30 MIN. BEFORE GOING INTO A CONFINED
SPACE OR NEAR AN IGNITION SOURCE.

===== Handling and Storage =====

Handling and Storage Precautions:CYLINDERS SHOULD BE STORED UPRIGHT IN
A WELL-VENTILATED AREA. STORAGE AREA TEMPERATURES SHOULD NOT EXCEED
125F (52C) & AREA SHOULD BE FREE OF COMBUSTIBLES. DO NOT DRAG,
ROLL, OR SLIDE CYLINDER. USE A PRESSURE REDUCING OR SEPARATE
CONTROL VALVE TO SAFELY DISCHARGE GAS FROM CYLINDER.

Other Precautions:ALL GAUGES, VALVES, REGULATORS, PIPING & EQUIPMENT TO
BE USED IN OXYGEN SERVICE MUST BE CLEANED FOR OXYGEN SERVICE IN

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===== Exposure Controls/Personal Protection =====

Respiratory Protection:GENERAL USE: NONE REQUIRED. EMERGENCY: USE SCBA,
DUE TO POSSIBILITY OF FIRE WHEN CONCENTRATIONS EXCEED 23%.
Ventilation:PROVIDE VENTILATION AND/OR LOCAL EXHAUST TO PREVENT
ACCUMULATION OF HIGH CONCENTRATIONS OF GAS (23%).
Protective Gloves:WORK GLOVES
Other Protective Equipment:SAFETY SHOES/WORK GLOVES RECOMMENDED WHEN
HANDLING CYLI
NDERS. CLOTHING EXPOSED TO HIGH CONCENTRATIONS MAY
RETAIN OXYGEN 30 MINUTES OR LONGER & BECOME POTENTIAL FIRE HAZARD.
STAY AWAY FM IGNITION SOURCES
Supplemental Safety and Health

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===== Physical/Chemical Properties =====

HCC:G4
Boiling Pt:=-182.9C, -297.2F
Melt/Freeze Pt:=-218.8C, -361.8F
Vapor Pres:N/A@70F
Vapor Density:70F(21.1C)
Spec Gravity:70F & 1ATM; 1.10 (AIR=1)
Solubility in Water:VOL/VOL AT 32F(0C); 0.049
Appearance and Odor:COLORLESS GAS. ODORLESS.

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===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES
OILS, GREASE, HYDROCARBONS AND FLAMMABLE MATERIALS.
Stability Condition to Avoid:NONE.
Hazardous Decomposition Products:NONE.

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===== Toxicological Information =====

Toxicological Information:AT ATMOSPHERIC CONCENTRATION & PRESSURE,
OXYGEN POSES NO TOXICITY HAZARDS. PREMATURE INFANTS EXPOSED TO HIGH
OXYGEN CONC. MAY SUFFER DELAYED RETINAL DAMAGE WH
ICH CAN PROGRESS
TO RETINAL DETACHMENT & B LINDNESS. RETINAL DAMAGE MAY ALSO OCCUR
IN ADULTS EXPOSED TO 100% OXYGEN FOR EXTENDED PERIODS (24 TO 48
HOURS).

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

Ecological:THE ATMOSPHERE CONTAINS 21% OXYGEN. NO ADVERSE ECOLOGICAL
EFFECTS ARE EXPECTED. OXYGEN DOES NOT CONTAIN ANY CLASS I OR CLASS
II OZONE DEPLETING CHEMICALS & IS NOT LISTED AS A MARINE POLLUTANT
BY DOT (49 CFR 171).

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sposal Considerations =====

Waste Disposal Methods:RETURN CONTAINER & UNUSED PRODUCT TO SUPPLIER.
DO NOT ATTEMPT TO DISPOSE OF RESIDUAL OR UNUSED QUANTITES. FOR
EMERGENCY DISPOSAL, SECURE CYLINDER & SLOWLY DISCHARGE GAS TO THE
ATMOSPHERE IN A WELL VE NTILATED AREA OR OUTDOORS.

===== MSDS Transport Information =====

Transport Information:OXYGEN, COMPRESSED, UN1072

===== Regulatory Information =====

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RA Title III Information:SECTION 302: REQUIRES EMERGENCY PLANNING
BASED ON THRESHOLD PLANNING QUANTITIES & RELEASE REPORTING BASED ON
REPORTABLE QUANTITIES OF EPA'S EXTREMELY HAZARDOUS SUBSTANCES (40
CFR 355). SECTIONS 311/3 12: REQUIRE SUBMISSION OF MATERIAL SAFETY
DATA SHEETS & CHEMICAL INVENTORY REPORTING WITH IDENTIFICATION OF
EPA DEFINED HAZARD CLASSES. THE HAZARD CLASSES FOR THIS PRODUCT
ARE: PRESSURE: YES. FLAMMABL E: YES.

Federal Regulatory Information:CERCLA: NO
REPORTABLE QUANTITY. OXYGEN
IS LISTED ON THE TSCA INVENTORY.

State Regulatory Information:CALIFORNIA: PROPOSITION 65: THIS PRODUCT
DOES NOT CONTAIN ANY LISTED SUBSTANCES FOR WHICH THE STATE OF
CALIFORNIA REQUIRES WARNING UNDER THIS STATUTE.

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