

AIR PRODUCTS AND CHEMICALS, INC. -- NITROGEN OR LIN IN CRYOGENIC LIQUID STATE --  
6830-00-937-7285

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Product Identification  
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Product ID:NITROGEN OR LIN IN CRYOGENIC LIQUID STATE

MSDS Date:08/27/1987

FSC:6830

NIIN:00-937-7285

MSDS Number: BHDZN

=== Responsible Party ===

Company Name:AIR PRODUCTS AND CHEMICALS, INC.

Address:2043 S 35TH ST

Box:11393

City:TACOMA

State:WA

ZIP:98411-0393

Countr

y:US

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:OXYGEN SALES AND SERVICE INC

Address:2043 S 35TH ST

Box:11393

City:TACOMA

State:WA

ZIP:98411-0393

Country:US

CAGE:5H199

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Composition/Information on Ingredients  
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Ingred Name:NITROGEN

CAS:7727-37-9

RTECS #:QW9700000

ACGIH TLV:ASPHYXIAN; 91

===== Hazards Identification =====

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:NITROGEN IS ODORLESS AND NONTOXIC, BUT MAY PRODUCE SUFFOCATION BY DILUTING THE CONCENTRATION OF OXYGEN IN AIR BELOW LEVELS NECESSARY TO SUPPORT LIFE. EXPOSURE TO OXYGEN DEFICIENT ATMOSPHERES MAY PRODUCE DIZZINESS, NAUSEA, VOMITING, LOSS OF CONSCIOUSNESS AND DEATH.

Eff

Effects of Overexposure:PERSONNEL INCLUDING RESCUE WORKERS SHOULD NOT ENTER AREAS WHERE OXYGEN CONCENTRATION IS BELOW 19% UNLESS PROVIDED WITH SELF-CONTAINED BREATHING APPARATUS OR AIRLINE RESPIRATOR. EXTENSIVE TISSUE DAMAGE OR BURNS CAN RESULT FROM EXPOSURE TO LIQUID NITROGEN OR COLD NITROGEN VAPORS.

Medical Cond Aggravated by Exposure:NK

NK

===== First Aid Measures =====

First Aid:PERSONS SUFFERING FROM LACK OF OXYGEN SHOULD BE MOVED TO

AREAS WITH NORMAL ATMOSPHERES. SELF CONTAINED BREATHING APPARATUS MAYBE REQD TO PREVENT ASPHYXIATION OF RESCUE WORKERS. ASSISTED RESPIRATION AND SUPPLEMENTAL OXYGEN SHOULD BE GIVEN IF VICTIM IS NOT BREATHING. CRYOGENIC BURNS W/RESULT IN BLISTERING OR DEEPER TISSUE FREEZING SHOULD BE SEEN PROMPTLY BY A PHYSICIAN.

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

Flash Point:NA

Lower Limits:NA

Upper Limits:NA

Extinguishing Media:NA

Fire Fighting P

rocedures:NA

Unusual Fire/Explosion Hazard:NA

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

Spill Release Procedures:AVOID CONTACT OF SKIN W/LIQUID NITROGEN OR ITS COLD BOILOFF GAS. FLUSH LIQ NITROGEN SPILL W/WTR TO DISPERSE. VENTILATE ENCLOSED AREAS TO PREVENT FORMATION OF OXYGEN-DEFICIENT ATMOSPHERES CAUSED BY EVAPORATION OF LIQUID NITROGEN.

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

Handling and Storage Precautions:PREVENT CON

TACT OF LIQ NITROGEN WITH

EXPOSED SKIN.USE PRESSURE REDUCING REGULATOR AND PRESSURE RELIEF DEVICES WHEN CONNECTING TO LOWER PRESSURE SYS.

Other Precautions:KEEP CYLINDERS AWAY FORM SOURCES OF HEAT. STORAGE SHOULD NOT BE IN HEAVY TRAFFICAREAS. SEGREGATE FULL AND EMPTY CYLINDERS. AVOID EXPOSURE TO TO AREAS WHERE SALTOR OTHER CORROSIVE CHEMICALS ARE PRESENT .

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

Respiratory Protection:SELF CONTAINED BREATHING APPARATUS IN OXYGEN

DEFICIENT ATMOSPHERES. CAUTION!! RESPIRATORS WILL NOT FUNCTION. USE MAY RESULT IN ASPHYXIATION.

Ventilation:NATURAL OR MECHANICAL WHERE GAS IS PRESENT.

Protective Gloves:LOOSE FITTING OF IMPERMEABLE MATERIAL

Eye Protection:CHEMICAL GOGGLES OR SAFETY GLASSES

Other Protective Equipment:NONE

Supplemental Safety and Health

VENTS SHOULD BE SITUATED TO AVOID HIGHER THAN NORMAL CONCENTRATION OF NITROGEN IN WORK AREAS.

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===== Physical/Chemical Properties ==

Boiling Pt:B.P. Text:@1ATM.07273

Vapor Pres:NA

Vapor Density:1 ATM50.45

Spec Gravity:@ BOILING .808

Appearance and Odor:BOTH LIQUID AND GASEOUS NITROGEN ARE COLORLESS AND ODORLESS

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

Stability Indicator/Materials to Avoid:YES

NONE

Stability Condition to Avoid:NONE

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===== Disposal Considerations =====

Waste Disposal Methods:ALLOW LIQUID NITROGEN TO EVAPORATE IN A WELL VENT

ILATED OUTDOOR LOCATION REMOTE FROM WORK AREAS. VENT NITROGEN  
GAS SLOWLY TO A WELL VENTILATED OUTDOORLOCATION REMOVTE FROM WORK  
AREAS. DO NOT ATTEMPT TO DISPOSE OF RESIDUAL NITROGEN IN  
CYLINDERS.

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