

AIR PRODUCTS AND CHEMICALS INC -- NITROGEN,REFRIGERATED LIQUID -- 9135-00-965-2526

===== Product Identification =====

Product ID:NITROGEN,REFRIGERATED LIQUID

MSDS Date:07/01/1995

FSC:9135

NIIN:00-965-2526

MSDS Number: CCGGS

=== 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:800-322-9092/8

00-523-9374

Emergency Phone Num:215-481-4911/800-523-9374

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

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

Ingred Name:NITROGEN

CAS:7727-37-9

RTECS #:QW9700000

Fraction by Wt: >99%

ACGIH TLV:ASPHYXIAN

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

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Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:LIQUID NITROGEN CAN CAUSE RAPID  
SUFFOCATION WHEN CONCENTRATIONS ARE SUFFICIENT TO REDUCE OXYGEN  
LEVELS BELOW 19.5%. CONTACT W/LIQUID/COLD VAPORS CAN CAUSE SEVERE  
FROSTBITE. INHALATION: SIMPLE ASPHYXIA NT. EYES/SKIN: TISSUE  
FREEZING & SEVERE CRYOGENIC BURNS.  
Explanation of Carcinogenicity:NONE  
Effects of Overexposure:DIZZINESS, DROWS  
INESS, NAUSEA, VOMITING, EXCESS  
SALIVATION, DIMINISHED MENTAL ALERTNESS, LOSS OF CONSCIOUSNESS,  
DEATH. SKIN CONTACT W/LIQUID NITROGEN: TISSUE FREEZING, BURNS, RED  
W/FORMATION OF BLISTERS.  
Medical Cond Aggravated by Exposure:NONE

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

First Aid:INHALATION: REMOVE TO FRESH AIR. GIVE CPR/OXYGEN IF NEEDED.  
SKIN: DON'T RUB FROZEN PARTS AS TISSUE DAMAGE MAY RESULT. PLACE IN  
WARM WATER BATH AT TEMP NOT EXCEEDING 105F  
. NEVER USE DRY HEAT. IF  
FROZEN PART OF BODY HAS BEEN THAWED, COVER W/DRY STERILE DRESSING  
W/LARGE BULKY PROTECTIVE COVERING, PENDING MEDICAL CARE. EYES: WARM  
FROSTBITE W/WARM WATER. OBTAIN MEDICAL ATTENTION IN ALL CASES.

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

Extinguishing Media:USE MEDIA APPROPRIATE FOR SURROUNDING AREAS.  
Fire Fighting Procedures:SIMPLE ASPHYXIAN. REMOVE CONTAINERS W/COOL  
WATER. DON'T DIRECT WATER SPRAY AT THE CONTAINER VENT. W  
EAR SCBA.  
EVACUATE AREA.  
Unusual Fire/Explosion Hazard:LIQUID NITROGEN WHEN SPILLED WILL  
VAPORIZE RAPIDLY FORMING AN OXYGEN DEFICIENT VAPOR CLOUD. PRESSURE  
CAN BUILD UP DUE TO HEAT & RUPTURE. (SEE SUPP)

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

Spill Release Procedures:EVACUATE AREA. INCREASE VENTILATION & MONITOR  
OXYGEN LEVEL. USE PROTECTIVE EQUIPMENT. TO INCREASE RATE OF  
VAPORIZATION, SPRAY LARGE AMOUNTS OF WATER FROM UPWIND POSITION.  
DON'T SP

RAY WATER DIRECTLY AT LEAK. IN USER SYSTEM, CLOSE CYLINDER VALVE/VENT.

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

Handling and Storage Precautions:USE ADEQUATE VENTILATION. DON'T STORE IN CONFINED SPACE. DON'T PLUG, REMOVE/TAMPER W/PRESSURE RELIEF DEVICE. NEVER TOUCH UNINSULATED PIPES/VESSELS.

Other Precautions:HANDLE/STORE IN UPRIGHT POSITION. DON'T DROP, TIP/ROLL CONTAINERS ON THEIR SIDES. DON'T REMOVE/INTERCHANGE CONNECTIONS. USE PROPER CONNECTIONS. DON'T USE ADAPTERS. USE PIPING/EQUIPMENT DESIGNED TO W/S TAND PRESSURE.

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

Respiratory Protection:SCBA/POSITIVE PRESSURE AIRLINE W/MASK & ESCAPE PACK ARE TO BE USED IN OXYGEN DEFICIENT ATMOSPHERE. RESPIRATORS WILL NOT FUNCTION.

Ventilation:MECHANICAL: TO PREVENT OXYGEN DEFICIENT ATMOSPHERES