

PURITAN-BENNETT -- NITROUS OXIDE COMPRESSED GAS CYLINDER
MATERIAL SAFETY DATA SHEET
NSN: 681000D007260
Manufacturer's CAGE: 45148
Part No. Indicator: A
Part Number/Trade Name: NITROUS OXIDE COMPRESSED GAS CYLINDER
(SUPPLEMENTAL)

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General Information
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Company's Name: PURITAN-BENNETT
Company's Street: 10800 PFLUMM ROAD
Company's City: LENEXA
Company's State: KS
Company's Country: US
Company's Zip Code: 66215-2182
Company's Emerg Ph #: 913-469-5400
Company's Info Ph #: 913-469-5400
Distributor/Vendor # 1: BALKAMP INC (317-248-0760)
Distributor/Vendor # 1 Cage: 70842
Distributor/Vendor # 2: NAPA
Distributor/Vendor # 2 Cage: 0NBN5
Safety Data Action Code: A
Record No. For Safety Entry: 001
Tot Safety Entries This Stk#: 001
Status: SE
Date MSDS Prepared: 20AUG91
Safety Data Review Date: 11AUG98
MSDS Serial Number: CHLDD
Specification Number: UNKNOWN
Hazard Characteristic Code: G3
Unit Of Issue: CY
Unit Of Issue Container Qty: 10 LB (MSDS)
Type Of Container: CYLINDER
Net Unit Weight: 10 LBS

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Ingredients/Identity Information
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Proprietary: NO
Ingredient: NITROUS OXIDE
Ingredient Sequence Number: 01
Percent: 99.9
Ingredient Action Code: A
NIOSH (RTECS) Number: QX1350000
CAS Number: 10024-97-2
OSHA PEL: NOT ESTABLISHED
ACGIH TLV: 50 PPM; 9596
Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO
Ingredient: SULFUR DIOXIDE (SARA 302)
Ingredient Sequence Number: 02
Percent: 0.01
Ingredient Action Code: A
NIOSH (RTECS) Number: WS4550000
CAS Number: 7446-09-5
OSHA PEL: 5 PPM
ACGIH TLV: 2 PPM/5 STEL; 9596
Other Recommended Limit: NONE RECOMMENDED

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Physical/Chemical Characteristics
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Appearance And Odor: COLORLESS GAS, PUNGENT ODOR.
Boiling Point: -127F,-89C
Melting Point: NA

Vapor Pressure (MM Hg/70 F): 745 PSIG
Vapor Density (Air=1): 1.53
Specific Gravity: NDA0
Decomposition Temperature: NP
Evaporation Rate And Ref: GAS
Solubility In Water: 129.7CC/100C H2O@32F
Percent Volatiles By Volume: 100
Viscosity: NP
pH: NP
Corrosion Rate (IPY): NP
Autoignition Temperature: NP

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Fire and Explosion Hazard Data
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Flash Point: NA
Flash Point Method: NP
Lower Explosive Limit: NA
Upper Explosive Limit: NA
Extinguishing Media: NON-FLAMMABLE. WILL SUPPORT COMBUSTION.
Special Fire Fighting Proc: KEEP CYLINDERS COOL WITH WATERSPRAY.
Unusual Fire And Expl Hazrds: OXIDIZING AGENT;MAY VIGOROUSLY ACCELERATE
COMBUSTION.CYLINDER MAY EXPLO IF PRESURE RELIEF DEVICES FAIL.CAN DECOMPOSE
EXPLO @ELEVATED TEMPS & PRESSURE.

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Reactivity Data
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Stability: YES
Cond To Avoid (Stability): EXCESS HEAT.
Materials To Avoid: COMBUSTIBLES.
Hazardous Decomp Products: NITROGEN, OXYGEN.
Hazardous Poly Occur: NO
Conditions To Avoid (Poly): EXCESS HEAT.

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Health Hazard Data
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LD50-LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.
Route Of Entry - Inhalation: YES
Route Of Entry - Skin: YES
Route Of Entry - Ingestion: NO
Health Haz Acute And Chronic: SOME STUDIES SUGGEST THAT LONG TERM EXPOSURE
MAY HAVE CERTAIN HEALTH HAZARDS TO OPERATING ROOM AND DENTAL PERSONNEL.
INHAL:ASPHYXIATION CAN OCCUR BY DISPLACEMENT OF AIR.HAS ANESTHETIC
PROPERTIES @HI CONCEN & CAN INDUCE HYSTERIA,DIZZ,UNCONSC,DEATH.INTENSELY
IRRIT.SKIN:CAN CAUSE CYROGENIC BURNS OR FROSTBITE.EYE:(SIGN/SYM)
Carcinogenicity - NTP: NO
Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO
Explanation Carcinogenicity: PER MSDS:NTP/IARC/OSHA:NO.
Signs/Symptoms Of Overexp: HEALTH:CAN CAUSE CYROGENIC BURNS OR
FROSTBITE,TEARING,AND SMARTING.INTENSELY IRRIT. ASPHYXIATION,ANESTHETIC
PROPERTIES,HYSTERIA,DIZZ,UNCONSC,DEATH,CYROGENIC SKIN/EYE BURNS OR
FROSTBITE,EYE-TEARING,SMARTING,IRRIT.
Emergency/First Aid Proc: INHAL:REMOVE TO WELL VENTI AREA.BREATH DIFF
ADMIN OXY.USE ART RESP IF NEEDED.OBTAIN PROMPT MED ATTN.SKIN:FLUSH AFFECTED
AREA W/WARM "NOT HOT"WATER.OBTAIN PROMPT MED ATTN.EYE:FLUSH W/WARM WATER &
OBTAIN PROMPT MED ATTN.

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Precautions for Safe Handling and Use
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Steps If Matl Released/Spill: PROVIDE ADEQUATE VENTILATION TO MAINTAIN OXY
CONCEN >19.5% BY VOL.LIQ CAN CAUSE CYROGENIC BURNS.SLOWLY VENT TO
ATMOSPHERE IN OPON AREA.
Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.
Waste Disposal Method: SLOWLY VENT TO ATMOSPHERE IN OPEN AREA.DISPO OF
CYLINDERS IAW LOCAL, STATE AND FEDERAL REGULATIONS.
Precautions-Handling/Storing: CYLINDERS SHOULD NOT BE DROPPED.KEEP THEM

SECURED OR PROTECTED TO PREVENT BEING KNOCKED OVER.CAN BE STORED OUTSIDE.
STORE UPRIGHT W/VALVE CAP IN PLACE.

Other Precautions: REFER TO CGA BULLETIN SB-2,OXY DEFICIENTY ATMOSPHERE &
CGA PAMPHLETS P-1 SAF HDNLG OF COMPRESSED GASES & CGA PAMPHLET P-14.

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Control Measures

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Respiratory Protection: SELF-CONTAINED BREATHING APPARATUS

Ventilation: LOCAL:YES. GENERAL:IF DESIRED.

Protective Gloves: COTTON,LEATHER,OR NEOPRENE

Eye Protection: NOT AS NORMALLY USED

Other Protective Equipment: SAFETY SHOES.

Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER.

Suppl. Safety & Health Data: USED FOR KITS:300-6000,-6001,-6002,-6003,-
6004,-6005,-6006.

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Transportation Data

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Transportation Action Code: A

Trans Data Review Date: 98223

Additional Trans Data: PER MSDS:TRANSPO DOMESTIC SURF:COMPRESSED
GAS,N.O.S.(NITROUS OXIDE,SUFLUR DIOXIDE), UN1956, NON-FLAMMABLE GAS.

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Disposal Data

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Label Data

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Label Required: YES

Technical Review Date: 11AUG98

Label Status: F

Common Name: NITROUS OXIDE COMPRESSED GAS CYLINDER
(SUPPLEMENTAL)

Chronic Hazard: YES

Signal Word: WARNING!

Acute Health Hazard-Slight: X

Contact Hazard-Slight: X

Fire Hazard-Slight: X

Reactivity Hazard-None: X

Special Hazard Precautions: SOME STUDIES SUGGEST THAT LONG TERM EXPO MAY
HAVE CERTAIN HEALTH HAZ TO OPERATING RM/DENTAL PERSONNEL.INHAL:ASPHYXIATION
BY AIR DISPLACEMENT,ANESTHETIC PROPERTIES @HI CONCEN,CAN INDUCE HYSTERIA,
REMOVE TO WELL VENTI AREA.BREATH DIFF ADMIN OXY.USE ART RESP IF NEEDED.
OBTAIN PROMPT MED ATTN.SKIN:FLUSH AFFECTED AREA W/WARM "NOT HOT"WATER.
OBTAIN PROMPT MED ATTN.EYE:FLUSH W/WARM WATER & OBTAIN PROMPT MED ATTN.
TARGET ORGANS:EYE/SKIN/ASPHYXIATION/CNS.

Protect Eye: Y

Protect Skin: Y

Protect Respiratory: Y

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