

# Nitrogen (N<sub>2</sub>) N.F.

Cylinder Color: Black

A colorless, odorless, nonflammable gas that constitutes a major portion (78.03% by volume) of the earth's atmosphere. Nitrogen is relatively nonreactive and will act as a simple asphyxiant by displacing air.

## Medical Applications

As a component in many gas mixtures, as a displacement medium for sterile equipment, as a nonoxidizing displacement medium in pharmaceutical vials, as a propellant in pressurized aerosol type dispensers, as a coolant for carbon dioxide surgical lasers and as a source of pressure to power pneumatic medical devices.

Before use, you should read and fully understand the Material Safety Data Sheet (MSDS) for this product.

## SPECIFICATIONS

Major Hazards	High Pressure and Suffocation
Exposure Limit	Simple Asphyxiant (ACGIH 2001)
Fire Potential	Nonflammable
Odor	None
Mol. Wt.	28.01
Sp. Gr. (Air = 1) 70° F (21° C)	0.967
Critical Temperature	-232.4° F (-146.9° C)
Critical Pressure	493 psia (34.7 kg/cm <sup>2</sup> abs)
Specific Volume	13.8 ft <sup>3</sup> /lb at 70° F (0.86 m <sup>3</sup> /kg at 15° C)
CAS Registry No.	7727-37-9
DOT Description	Nitrogen, Compressed, 2.2, UN1066 Nitrogen, Refrigerated Liquid, 2.2, UN1977

## PURITY SPECIFICATIONS

N.F.	99.0% N <sub>2</sub> , min.
CO	<10 ppm
Odor	None detected

VALVE CONNECTION	CYLINDER SIZE	CONTENTS	PRESSURE psig @ 70° F	NOMINAL GROSS WT.	PART NUMBER	RECOMMENDED Regulator or Valve	MODEL/PAGE
<b>CGA 295 (1/2" Flare) Liquid Withdrawal</b>	240LT	240 L 5550 ft <sup>3</sup>	22 psig 1.55 kg/cm <sup>2</sup>	649 lb 295 kg	NI NF240LT	Valve	—
<b>CGA 295 (1/2" Flare) Liquid Withdrawal</b>	180LT	184 L 4250 ft <sup>3</sup>	22 psig 1.55 kg/cm <sup>2</sup>	510 lb 233 kg	NI NF180LT	Valve	—
<b>CGA 580 (Threaded) CGA 295 (1/2" Flare) Liquid Withdrawal</b>	160LT	4016 ft <sup>3</sup> 113 m <sup>3</sup>	230 psig 16.2 kg/cm <sup>2</sup>	532 lb 240 kg	NI NF160LT	Regulator	30/54
<b>CGA 580 (Threaded)</b>	300	304 ft <sup>3</sup> 8.61 m <sup>3</sup>	2640 psig 185.7 kg/cm <sup>2</sup>	165 lb 75.5 kg	NI NF300+	Regulator	40/55
<b>CGA 580 (Threaded)</b>	250	254 ft <sup>3</sup> 7.19 m <sup>3</sup>	2490 psig 175.1 kg/cm <sup>2</sup>	165 lb 75.5kg	NI NF250+	Regulator	40/55
<b>CGA 580 (Threaded)</b>	200	229 ft <sup>3</sup> 6.48 m <sup>3</sup>	2200 psig 154.7 kg/cm <sup>2</sup>	165 lb 75.5 kg	NI NF200+	Regulator	40/55
<b>CGA 960 (Pin-Indexed)</b>	ME	23.0 ft <sup>3</sup> 0.65 m <sup>3</sup>	2015 psig 141.7 kg/cm <sup>2</sup>	16.2 lb 7.35 kg	NI NFE	Regulator	40/55
<b>CGA 960 (Pin-Indexed)</b>	ED	19.2 ft <sup>3</sup> 0.54 m <sup>3</sup>	2200 psig 154.7 kg/cm <sup>2</sup>	13.5 lb 6.12 kg	NI NFED	Regulator	40/55
<b>CGA 960 (Pin-Indexed)</b>	MD	14.1 ft <sup>3</sup> 0.40 m <sup>3</sup>	2015 psig 141.7 kg/cm <sup>2</sup>	10.5 lb 4.76 kg	NI NFD	Regulator	40/55

**i** Bulk liquid nitrogen is also available. Please contact your Puritan Medical Products branch for details.