

ELECTRONIC GASES

NITROGEN N₂

Nitrogen is a colorless, odorless, nontoxic, nonflammable gas that is lighter than air. It is shipped in steel cylinders under high pressure.

Container Information

CYLINDER SIZE	CONTENTS	Pressure@21.1°C	2000 psig
	CU.FT.	Valve Outlet	CGA-580
044	200	DOT Shipping Description:	Nitrogen, compressed, 2.2, UN 1066
		DOT Shipping Labels	Nonflammable Gas
		DOT Guide No.	12
		CAS Registry No.	7727-37-9

Specifications

COMPONENT NITROGEN	ULSI 99.9999%min	Research 99.9995%min
Carbon Dioxide	< 100 ppb	<i>Total < 5 ppm for all gases</i>
Other Monoxide	< 200 ppb	
Oxygen	< 200 ppb	
THC (as Methane)	< 50 ppb	
Water	< 400 ppb	
SHELF LIFE: 2 years		

Physical Properties

Molecular Weight	28.013
Flammability Limits in air	Nonflammable
Specific Gravity, Gas @ 70°F(21.1°C), 1 atm(Air=1)	0.96
Liquid Density @ Boiling Point	50.47lb/ft³ (808.5g/l)
Density, Gas @ 70°F(21.1°C), 1 atm	0.0725lbs/ft³ (1.16g/l)
Specific Volume, Gas @ 70°F(21.1°C), 1 atm	13.8ft³/lb (0.862l/g)
Boiling Point @ 1 atm	-320.4°F (-195.8°C)
Critical Temperature	-232.8°F (-147.1°C)
Critical Pressure	492.45 psia (33.96 bar)
Toxicity	Non-Toxic, asphyxiant only