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**MATERIAL
SAFETY
DATA SHEET**
No. 48

SECTION 1. PRODUCT INFORMATION

NAME : Nitrogen

TRADE NAME AND SYNONYMS: Nitrogen, Compressed (D.O.T.)

APPEARANCE AND ODOR : Colorless, odorless gas

CHEMICAL NAME AND SYNONYMS : Nitrogen gas

CAS # : 7727-37-9

DOT I.D. No : UN 1066

DOT HAZARD CLASS : Division 2.2

CHEMICAL FORMULA : N₂

CHEMICAL FAMILY : Inert Gas

ISSUE DATE AND REVISIONS : Revised December 2005

SECTION 2. HEALTH HAZARD DATA

EMERGENCY OVERVIEW : Nitrogen is a non-flammable, inert gas which is slightly lighter than air.

Inhalation: Moderate concentrations so as to exclude an adequate supply of oxygen to the lungs causes dizziness, drowsiness and eventual unconsciousness.

Symptoms of exposure to high concentrations so as to displace the oxygen in air necessary for life may include any, all or none of the following:

- ~ Loss of balance or dizziness
- ~ Tightness in the frontal area of the forehead
- ~ Tingling in the tongue, fingertips or toes
- ~ Weakened speech leading to the inability to utter sounds
- ~ Rapid reduction in the ability to perform movements
- ~ Reduced consciousness of the surroundings
- ~ Loss of tactile sensations
- ~ Heightened mental activity

It should be recognized that it is possible that none of the above symptoms may occur in Nitrogen asphyxia so that there are no definite warning symptoms.

TIME WEIGHTED AVERAGE EXPOSURE LIMIT : Nitrogen is defined as a simple asphyxiant (ACGIH 2005). OSHA 2005 has no listing for Nitrogen.

Oxygen levels should be maintained at greater than 19.5 Molar percent at normal atmospheric pressure (pO₂>148 torr).