

OFI TESTING EQUIPMENT, INC.  
**MATERIAL SAFETY DATA SHEET**

<b>SECTION I - PRODUCT AND COMPANY IDENTIFICATION</b>	
<b>Chemical Name:</b>	NITROGEN
<b>Trade Name:</b>	NITROGEN
<b>OFI Part No.</b>	170-37
<b>Chemical Family:</b>	NITROGEN
<b>Formula:</b>	N <sub>2</sub>
<b>Manufacturer:</b>	OFI Testing Equipment, Inc. 11302 Steeplecrest Drive Houston, TX 77065 USA Phone: (713) 880-9885
<b>In Case of Emergency Spills, Leaks, Fire, Exposure or Accident:</b>	In the USA, call INFOTRAC at 1-800-535-5053 day or night Outside the USA, call collect, (352) 323-3500
<b>SECTION II - COMPOSITION / INFORMATION ON INGREDIENTS</b>	
<b>CAS #</b>	<b>CHEMICAL NAME</b>
7727-37-0	Nitrogen 100.0%
<b>SECTION III - HAZARD IDENTIFICATION</b>	
<b>Emergency Overview:</b>	Colorless non-flammable gas which may cause eye, skin, and respiratory irritation. High concentrations of gas may accumulate in confined or poorly ventilated areas, displacing oxygen and causing unconsciousness or death. Use only with adequate ventilation. Contents under pressure. Avoid heat, sparks, and flames. Protect containers from physical damage.
<b>Inhalation:</b>	Nitrogen is a simple asphyxiant which exerts no other physiological effect beyond oxygen deprivation. Symptoms of exposure to oxygen deficient environments include dizziness, headache, loss of consciousness, and under some circumstances death.
<b>Ingestion:</b>	No Information Found.
<b>Skin or Eyes:</b>	Contact with rapidly expanding gases may cause burns or frostbite. Not other health effects are known from contact with Nitrogen.
<b>ACUTE:</b>	This gas presents a slight risk of causing acute health effects other than asphyxiation. The most severe acute effects would be harm to the skin or eyes.
<b>Chronic Exposure:</b>	Nitrogen is not known to cause any chronic illness or diseases.
<b>Aggravated by Exposure:</b>	None Known.
<b>SECTION IV - FIRST AID MEASURES</b>	
<b>Inhalation:</b>	Immediately Remove Victim to Fresh Air. If Breathing has Stopped, Give Artificial Respiration. If Breathing is Difficult, Give Oxygen and Get Medical Attention. Only trained personnel should administer supplemental oxygen.
<b>Ingestion:</b>	No Information Found.
<b>Skin:</b>	If Frostbite Occurs, Flush Affected Areas with Lukewarm Water. Do Not Use Hot Water. Get Medical Attention. If warm water is not available, or impractical to use, wrap the affected parts gently in blankets.
<b>Eyes:</b>	No Information Found.
<b>SECTION V - FIRE FIGHTING MEASURES</b>	
<b>Fire:</b>	Not Considered to be a Fire Hazard. Non-Flammable Gas.
<b>Explosion:</b>	Not Considered to be an Explosion Hazard. Rupture may Occur Under Fire Conditions. Use What is Appropriate for Surrounding Fire.
<b>Fire Extinguishing Media:</b>	Not normally ignitable. Use extinguishing media appropriate for surrounding material. Use Foam, Water Spray, CO <sub>2</sub> , Dry Chemical, Halon and any Class B material.
<b>Special Information:</b>	Keep unused cylinders cool using a water spray. Structural fire fighters must wear Self-Contained Breathing Apparatus and full protective equipment.
<b>SECTION VI - ACCIDENTAL RELEASE MEASURES</b>	
Ventilate Area of Leak or Spill. Wear Appropriate Personal Protective Equipment as Specified in Section 8. Shut Off Source if Possible and Remove Source of Heat. Remove Leaking Cylinder to Exhaust Hood or Safe Outdoor Area if This can be Done Safely. For uncontrolled releases, monitor the surrounding area for oxygen content. The atmosphere must have at least 19.5 % oxygen before personnel can be allowed in the area without Self-Contained Breathing Apparatus. Ventilate the affected area. Attempt to shut-off the release by tightening the main valve. If this does not stop the release (or it is not possible to reach the valve), allow the gas to release in place, or remove the container to a safe area and allow the gas to be released there.	

<b>SECTION VII - HANDLING AND STORAGE</b>	
Store in well Ventilated Areas and Away from Heat. Protect Containers from Physical Damage. Do Not Deface Cylinders or Labels. Cylinders should be Refilled by Qualified Producers of Compressed Gas. Do not exceed 48 °C storage temperature. Keep cylinders secure.	
<b>SECTION VIII - EXPOSURE CONTROL / PERSONAL PROTECTION</b>	
<b>Ventilation System:</b>	Use the adequate ventilation. Use a mechanical fan or vent area to outside.
<b>Airborne Exposure Limits:</b>	ACGIH Threshold Limit Value (TLV), NA OSHA (PEL) NA, (STEL) NA.
<b>Personal Respirators: (NIOSH APPROVED)</b>	Use a Self-Contained Breathing Apparatus in Case of Emergency or Non-Routine Use.
<b>Skin Protection:</b>	Loose Fitting Gloves or Impermeable Material, Such as Leather, When Working with Cold Liquid, Solid or Vapor.
<b>Eye Protection:</b>	Use Safety Glasses.
<b>SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES</b>	
<b>Appearance / Odor:</b>	Compressed Gas / Odorless
<b>Solubility:</b>	0.023 @ 68 °F (v/v) in water.
<b>Density:</b>	1.38 (air = 1)
<b>pH:</b>	No Information Found
<b>% Volatiles by Vol.:</b>	No Information Found
<b>Melting Point:</b>	- 209.9 °C
<b>Boiling Point:</b>	- 195.8 °C
<b>Vapor Density (Air=1):</b>	1.53
<b>Vapor Pressure (mmHg):</b>	No Information Found
<b>SECTION X - STABILITY AND REACTIVITY</b>	
<b>General Reactivity:</b>	Stable.
<b>Hazardous Decomposition:</b>	Not Applicable.
<b>Incompatibilities:</b>	Nitrogen is non-corrosive and inert, and may be contained in systems constructed of any common metal and designed to safely withstand the pressures involved.
<b>Hazardous Polymerization:</b>	Will not occur.
<b>SECTION XI - TOXICOLOGICAL INFORMATION</b>	
<b>Carcinogenic References:</b>	NTP Carcinogen - Known: No, IARC Category- None
<b>SECTION XII - ECOLOGICAL INFORMATION</b>	
<b>Environmental Stability:</b>	No adverse environmental consequences are expected. Nitrogen occurs naturally in the environment. The gas will dissipate rapidly in well ventilated areas.
<b>SECTION XIII - DISPOSAL CONSIDERATIONS</b>	
Dispose of Non-Refillable Cylinders in Accordance with Federal, State and Local Regulations. Allow Gas to Vent Slowly to Atmosphere in an Unconfined Area or Exhaust Hood. If the Cylinders are the Refillable Type, Return Cylinders to Supplier with any Valve Outlet Plugs or Caps Secured and Valve Protection Caps in Place.	
<b>SECTION XIV - TRANSPORT INFORMATION</b>	
<b>Shipping Name:</b>	Nitrogen, Compressed
<b>Hazard Class:</b>	2.2 (NONFLAMMABLE GAS)
<b>Identification No.:</b>	UN1066
<b>SECTION XV - REGULATORY INFORMATION</b>	
SARA TITLE III - HAZARD CLASSES: Sudden Release of Pressure Hazard	
<b>SECTION XVI - OTHER INFORMATION</b>	
<b>NFPA Rating:</b>	HEALTH-1, FLAMMABILITY-0, REACTIVITY-0
<b>Disclaimer:</b>	The information contained herein is based upon data believed to be reliable and reflects our best professional judgment. Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein and assume no responsibility regarding the suitability of this information for the user's intended purpose or for the consequence of its use. Each individual should make a determination as to the suitability of the information for his/her particular purpose(s).