



SC INDUSTRIAL GAS

MANUFACTURERS LTD

MATERIAL SAFETY DATA SHEET

NITROGEN GAS

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME	NITROGEN GAS
UN NO.	UN 1066
PRODUCT USE	INERT BLANKETTING, SYNTHETIC/ANALYTICAL CHEMISTRY
SYNONYMS	NITROGEN, NITROGEN COMPRESSED, NITROGEN GAS,
SUPPLIER	S C INDUSTRIAL GAS MFG LTD., KM 3, IGBO ETCHE ROAD, OFF ELEME JUNCTION, PORT HARCOURT. RIVERS STATE.
EMERGENCY CONTACT:	084799837, 08033061842

2. HAZARDS IDENTIFICATION

PHYSICAL STATE	COLOURLESS AND ODORLESS COMPRESSED GAS
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EMERGENCY OVERVIEW

WARNING!

SIMPLE ASPHYXIAN

CONTENTS UNDER PRESSURE

KEEP AT TEMPERATURE BELOW 52C/125F

ROUTES OF EXPOSURE

INHALATION

ACUTE TOXICITY**INHALATION**

SIMPLE ASPHYXIAN. MAY CAUSE SUFFOCATION BY DISPLACING THE OXYGEN IN THE AIR. EXPOSURE TO OXYGEN-DEFICIENT ATMOSPHERE (<19.5%) MAY CAUSE DIZZINESS, DROWSINESS, NAUSEA, VOMITTING, EXCESS SALIVATION, DIMINISHED MENTAL ALERTNESS, LOSS OF UNCONCIOUSNESS AND DEATH.

OVER EXPOSURE

ACUTE OR CHRONIC RESPIRATORY CONDITIONS MAY BE AGGRAVATED BY OVER-EXPOSURE TO THIS GAS.

EYES & SKIN

THIS PRODUCT IS A GAS AT ROOM TEMPERATURE. CONTACT WITH LIQUID NITROGEN MAY CAUSE FROSTBITE.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	% VOLUME	CHEMICAL FORMULA
NITROGEN	7727-37-9	>99.5	N2

4. FIRST AID MEASURES

EYE & SKIN	NONE REQUIRED FOR GAS.
INHALATION	PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES OF INHALATION OVEREXPOSURE. RESCUE PERSONNEL SHOULD BE EQUIPPED WITH SELF-CONTAINED BREATHING APPARATUS. CONSCIOUS VICTIMS SHOULD BE ASSISTED TO AN UNCONTAMINATED AREA AND INHALE FRESH AIR. IF NOT BREATHING, IF BREATHING IS IRREGULAR OR IF RESPIRATORY ARREST OCCURES, PROVIDE ARTIFICIAL RESPIRATION BY A TRAINED PERSONNEL. LOOSEN TIGHT CLOTHING SUCH AS A COLLAR, TIE, BELT OR WAISTBAND. GET MEDICAL ATTENTION IMMEDIATELY.
INGESTION	NOT AN EXPECTED ROUTE OF EXPOSURE.

5. FIRE FIGHTING MEASURES

FLAMMABILITY	NOT FLAMMABLE.
EXTINGUISHING MEDIA	USE AN EXTINGUISHING AGENT SUITABLE FOR THE SURROUNDING FIRE.
EXPLOSION DATA	
SPECIFIC HAZARDS	CYLINDER MAY RUPTURE UNDER EXTREME HEAT. CONTINUE TO COOL FIRE EXPOSED CYLINDERS UNTIL FLAMES ARE EXTINGUISHED. DAMAGED CYLINDERS SHOULD BE HANDLED ONLY BY SPECIALISTS.
PROTECTIVE EQUIPMENT	AS IN ANY FIRE, WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS ENSURE ADEQUATE VENTILATION. EVACUATE PERSONNEL TO SAFE AREAS. USE PERSONAL PROTECTIVE EQUIPMENT. MONITOR OXYGEN LEVEL.

ENVIRONMENTAL PREVENT SPREADING OF GAS THROUGH SWERS, VENTILATION SYSTEMS AND CONFINED AREAS.

METHODS OF

CONTAINMENT STOP THE FLOW OF GAS OR REMOVE CYLINDER TO OUTDOOR LOCATION IF THIS CAN BE DONE WITHOUT RISK. IF LEAK IS IN CONTAINER OR CONTAINER VALVE, CONTACT THE EMERGENCY TELEPHONE NUMBER.

CLEANING UP RETURN THE CYLINDER TO COMPANY,

S C INDUSTRIAL GAS MFG LTD.

7. HANDLING AND STORAGE

HANDLING COMPRESSED GAS. USE EQUIPMENT RATED FOR THE CYLINDER PRESSURE. CLOSE VALVE AFTER EACH USE AND WHEN EMPTY. PROTECT CYLINDERS FROM PHYSICAL DAMAGE – DO NOT DRAG – SLIDE – ROLE. USE A SUITABLE HAND TROLLY FOR CYLINDER MOVEMENTS. USE ONLY IN VENTILATED AREAS. NEVER ATTEMPT TO LIFT THE CYLINDER BY ITS CAP.

NEVER PUT CYLINDERS INTO TRUNKS OF CARS OR UNVENTILATED AREAS OF PASSENGER VEHICLES. NEVER STRIKE AN ARC ON A COMPRESSED GAS CYLINDER OR MAKE A CYLINDER A PART OF AN ELECTRICAL CIRCUIT.

STORAGE

CYLINDERS SHOULD BE STORED UPRIGHT WITH VALVE PROTECTION CAP IN PLACE AND FIRMLY SECURED TO PREVENT FALLING. KEEP AT TEMPERATURE BELOW 52 C/125 F.

FULL AND EMPTY CYLINDERS SHOULD BE SEGREGATED. USE A "FIRST IN – FIRST OUT" INVENTORY SYSTEM TO PREVENT FULL CYLINDERS FROM BEING STORED FOR EXCESSIVE PERIODS OF TIME.

STORE IN COOL, DRY, WELL-VENTILATED AREA OF NON-COMBUSTIBLE CONSTRUCTION AWAY FROM HEAVILY TRAFFICKED AREAS AND EMERGENCY EXITS.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS USE ONLY WITH ADEQUATE VENTILATION. USE PROCESS ENCLOSURES, LOCAL EXHAUST VENTILATION OR OTHER ENGINEERING CONTROLS TO KEEP WORKER EXPOSURE TO AIRBORNE CONTAMINANTS BELOW ANY RECOMMENDED OR STATUTORY LIMITS.

SHOWERS, EYEWASH STATIONS, VENTILATION SYSTEMS.

PERSONAL PROTECTION WORK GLOVES AND SAFETY SHOES ARE RECOMMENDED WHEN HANDLING CYLINDERS.

IN EMERGENCY USE POSITIVE PRESSURE RESPIRATOR WITH ESCAPE CYLINDER OR SELF CONTAINED BREATHING APPARATUS FOR OXYGEN-DEFICIENT ATMOSPHERES (<19.5%).

WEAR SUITABLE GLOVES AND EYE/FACE PROTECTION.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	COLOURLESS	ODOR	ODORLESS
PHYSICAL STATE	COMPRESSED GAS	BOILING POINT	-195.8 C
FREEZING POINT	-209.9 C	MOLECULAR WEIGHT	28.02g/mole
VAPOUR DENSITY	0.97(air = 1)	GAS DENSITY	1.153kg/cu.m
SPECIFIC VOLUME	13.8 cu.ft/lb	CRITICAL PRESSURE	492.9 psia

10. STABILITY AND REACTIVITY

Stability and Reactivity

The Product is stable.

Hazardous Decomposition Products

Under normal conditions of storage and u hazardous decomposition products should not be produce

Harzardous Polymerization

Under normal conditions of storage and use, harzardous polymerizations will not occure.

11. TOXICOLOGICAL INFORMATION

Toxicity data

Other toxic effects on humans: No specific information is available in our data base regarding the toxic effects of this material on human

Specific effects

Carcinogenic effects

No Known significant effects or critical hazards.

Mutagenic effects

No Known significant effects or critical hazards.

Reproduction toxicity

No Known significant effects or critical hazards

12. ECOLOGICAL INFORMATION

Aquatic Ecotoxicity

Not Available

Environmental fate

No known significant or critical hazards

Toxicity to the environment

Not available

13. DISPOSAL CONSIDERATIONS

Product removed from the cylinder must be disposed of in accordance with appropriate Federal, State, Local regulation. Return cylinders with residual product to **SC INDUSTRIAL GAS**. Do not dispose of locally.

14. TRANSPORT INFORMATION

CLASSIFICATION	UN NUMBER	SHIPPING NAME	CLASS
DOT	UN 1066	NITROGEN COMPRESSED	2.2 (5.1)
TDG	UN 1066	NITROGEN COMPRESSED	2.2 (5.1)
IATA	UN 1066	NITROGEN COMPRESSED	2.2 (5.1)

AVOID TRANSPORT ON VEHICLES WHERE THE LOAD SPACE IS NOT SEPARATED FROM THE DRIVER'S COMPARTMENT. ENSURE VEHICLE DRIVER IS AWARE OF THE POTENTIAL HAZARDS OF THE LOAD AND KNOWS WHAT TO DO IN THE EVENT OF AN ACCIDENT OR AN EMERGENCY. THE TRANSPORTATION INFORMATION IS NOT INTENDED TO CONVEY ALL SPECIFIC REGULATORY DATA RELATING TO THIS PRODUCT. FOR FURTHER TRANSPORTATION INFORMATION, CONTACT **S C INDUSTRIAL GAS MFG LTD.**

15. REGULATORY INFORMATION

COUNTRY	REGULATORY LIST	NOTIFICATION
USA	TSCA	LISTED
EU	EINECS	LISTED
CANADA	DSL	LISTED
AUSTRALIA	AICS	LISTED
JAPAN	ENCS	LISTED
CHINA	SEPA	LISTED

TSCA – UNITED STATES TOXIC SUBSTANCES CONTROL ACT SECTION 8(b) INVENTORY

DSL – CANADIAN DOMESTIC SUBSTANCES LIST/NON DOMESTIC SUBSTANCES LIST

EINECS – EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES

16. OTHER INFORMATION

LABEL REQUIREMENTS GAS, COMPRESSED

	HEALTH HAZARD	FLAMMABILITY	STABILITY	SPECIAL
NFPA	0	0	0	Nr
HMIS	0	0	3	PERSONAL PROTECTION

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