

## Nitrogen

N<sub>2</sub>

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier	
Name of product	Nitrogen Art-Nr.: 3900 - 3903
Name of substance	Nitrogen
EC No	231-783-9
CAS No	7727-37-9

#### Manufacturer / Distributor:

#### Ehsan International Gases

40/9, Aurangabad, Nazimabad  
#3, Karachi 74600, Pakistan.  
+92 21 36612091 – 36612907

[info@ehsan.com.pk](mailto:info@ehsan.com.pk)

[www.ehsan.com.pk](http://www.ehsan.com.pk)

#### Relevant identified uses of the substance or mixture and uses advised against

Recommended intended purpose(s) Basic substance.

Propellant.

Cover gas.

Details of the supplier of the safety data sheet:

### SECTION 2: Hazards identification

#### Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

Hazard classes and Hazard	Hazard Statements	Classification procedure categories
---------------------------	-------------------	-------------------------------------

Compr. Gas	H280	
------------	------	--

#### Hazard statements for physical hazards

H280	Contains gas under pressure; may explode if heated.
------	---

#### Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]



## Nitrogen

N<sub>2</sub>

GHS04

### Signal word

Warning

### Hazard statements for physical hazards

H280 Contains gas under pressure; may explode if heated.

### Precautionary Statements

### Storage

P403 Store in a well-ventilated place.

### Other hazards

#### ! Adverse human health effects and symptoms

Asphyxiant in high concentrations.

## SECTION 3: Composition/ information on ingredients

### Substances

CAS No 7727-37-9 Nitrogen EC No 231-783-9

#### ! Additional advice

The substance does not require registration according to Article 2 (7) in conjunction with Annex IV / V of the Regulation (EC) No 1207/2006 [REACH].

## SECTION 4: First aid measures

### Description of first aid measures

#### General information

Adhere to personal protective measures when giving first aid.

#### In case of inhalation

Remove the casualty into fresh air, keep warm and allow to rest.

Seek medical treatment immediately.

In case of respiratory standstill give artificial respiration by respiratory bag (Ambu bag) or respirator. Send for a doctor.

#### In case of ingestion

Ingestion is not considered a potential route of exposure.

#### Most important symptoms and effects, both acute and delayed

#### ! Physician's information / possible symptoms

Not known.

#### Indication of any immediate medical attention and special treatment needed

#### ! Treatment (Advice to doctor)

Treat symptoms.

## SECTION 5: Firefighting measures

### Extinguishing media

#### Suitable extinguishing media

Product does not burn, fire-extinguishing activities according to surrounding.

## Nitrogen

N<sub>2</sub>

**! Extinguishing media which must not be used for safety reasons**  
no

**Special hazards arising from the substance or mixture**

**Advice for firefighters**

**Special protective equipment for fire-fighters**

Use breathing apparatus with independent air supply ( isolated ).

**! Additional information**

Cool endangered containers with water spray jet.

### SECTION 6: Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

See chapter 8.

Remove persons to safety.

Evacuate area.

**Environmental precautions** If

possible, stop flow of product.

**Methods and material for containment and cleaning up**

Ensure adequate air ventilation.

**Reference to other sections**

Informations for safe handling see chapter 7.

Informations for personal protective equipment see chapter 8.

### SECTION 7: Handling and storage

**Precautions for safe handling**

**! Advice on safe handling**

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

Prevent cylinders from falling over.

Ensure valve protection device is correctly fitted.

Ensure valve outlet cap nut or plug (where provided) is correctly fitted.

Open valve slowly to avoid pressure shock.

Use only properly specified equipment which is suitable for this product, its supply pressure and temperature.

Do not allow backfeed into the container.

Suck back of water into the container must be prevented.

No water to valves, flanges and other fittings.

Purging of pipes and valves with inert gases - to avoid: water, solvents.

**Conditions for safe storage, including any incompatibilities**

**Requirements for storage rooms and vessels** Use

transportable pressure equipment.

Suitable materials: Normalised steel and carbon steel, tempered steel, aluminium alloys, stainless steel. Valve:

Suitable materials: Brass, copper alloys, carbon steels, aluminium alloys, stainless steel.

**! Advice on storage compatibility**

Do not store together with combustible liquids or combustible solids.

Do not store together with animal feedstuffs.

Do not store together with explosives.

Do not store together with infectious substances.

## Nitrogen

N<sub>2</sub>

Do not store together with radioactive material.  
Do not store together with toxic liquids or toxic solids.  
Do not store together with food.  
Do not store together with oxidizing liquids or oxidizing solids.

### Further information on storage conditions

Store only in original container at temperature of 50°C maximum (=122°F).  
Keep container in a well-ventilated place

### Specific end use(s)

#### ! Recommendation(s) for intended use

No further recommendations.

## SECTION 8: Exposure controls/personal protection

### Control parameters

### Exposure controls

#### ! Respiratory protection

Keep self contained breathing apparatus readily available for emergency use.  
In case of rescue and maintenance activities in storage containers use environment-independent breathing apparatus because of risk of suffocation by edging out of air oxygen

### Hand protection

Leather gloves

### Eye protection

safety goggles

#### ! Skin protection

Safety shoes with steel toe.

### Hygiene measures

At work do not eat, drink and smoke.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

#### Form

compressed gas

#### Colour

colourless

#### Odour

odourless

### Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
<b>pH value in delivery state</b>	not applicable				
	Value	Temperature	at	Method	Remark

**boiling point**      -196 °C **melting point**

-210 °C

**Flash point**                      no

## Nitrogen

N<sub>2</sub>

<b>Flammable solid</b>	not applicable	
<b>Flammability (gas)</b>	no	
<b>Ignition temperature</b>	no	
<b>Autoignition</b>	no	
<b>Lower explosion limit</b>	no	
<b>Upper explosion limit</b>	no	
<b>Vapour pressure</b>	not applicable	
<b>Density</b>	0,8085 g/cm <sup>3</sup>	-196 °C
<b>Bulk density</b>	not applicable	
<b>Rel. vapour density</b>	0,97	air = 1
<b>Solubility in water</b>	20 mg/l	20 °C
<b>Oxidizing properties</b>	no	
<b>Explosive properties</b>	no	
<b>Other information</b>		

### SECTION 10: Stability and reactivity

**Reactivity**

See section "Possibility of hazardous reactions".

**Chemical stability**

Stable under normal conditions.

**Possibility of hazardous reactions**

Not known.

**Conditions to avoid**

Heat sources / heat.

**Incompatible materials**

**! Materials to avoid**

Not known.

**Hazardous decomposition products**

No hazardous decomposition products known.

**Thermal decomposition**

## Nitrogen

N<sub>2</sub>

Remark No decomposition if used as directed.

### SECTION 11: Toxicological information

#### Information on toxicological effects

##### ! Additional information

No known toxicological effects from this product.

### SECTION 12: Ecological information

#### Toxicity

#### Persistence and degradability

Persistence and degradability	Elimination rate	Method of analysis	Method	Validation

**Physico-chemical** not applicable **degradability**

**Biological degradability** not applicable

#### Bioaccumulative potential

Does not bioaccumulate.

#### Mobility in soil

not applicable

#### Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

#### Other adverse effects

Not known.

##### ! General regulation

No known ecological damage caused by this product.

### SECTION 13: Disposal considerations

#### Waste treatment methods

##### ! Recommendations for the product

Discharge to atmosphere in a well ventilated place.

Do not discharge into any place where its accumulation could be dangerous.

#### Recommendations for packaging

Transportable pressure equipment (empty, residual pressure): Return to supplier / manufacturer.

### SECTION 14: Transport information

#### Land and inland navigation transport ADR/RID

UN 1066 NITROGEN, COMPRESSED, 2.2, (E), Classification code: 1A

#### Marine transport IMDG

UN 1066 NITROGEN, COMPRESSED, 2.2

EmS: F-C, S-V

#### Air transport ICAO/IATA-DGR

UN 1066 Nitrogen, compressed, 2.2

## Nitrogen

N<sub>2</sub>

### Special precautions for user

The protective measures listed in Sections 6, 7 and 8 of the Safety Data Sheet have to be considered.

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No transport as bulk according IBC - Code.

---

## SECTION 15: Regulatory information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Chemical Safety Assessment

For this substance a chemical safety assessment is not required.

The protective measures listed in Sections 6, 7 and 8 of the Safety Data Sheet have to be considered.

---

## SECTION 16: Other information

### Recommended uses and restrictions

National and local regulations concerning chemicals shall be observed.

### Further information

All declarations of safety-data-sheet refer to pure substance.

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

H280 Contains gas under pressure; may explode if heated.