

Oxygen

O₂

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

Product identifier	
Name of product	Oxygen Art-Nr.: 0700-0703
Name of substance	oxygen
Index No	008-001-00-8
EC No	231-956-9
CAS No	7782-44-7

Manufacturer / Distributor:

Ehsan International Gases
40/9, Aurangabad, Nazimabad
#3, Karachi 74600, Pakistan.
+92 21 36612091 – 36612907
info@ehsan.com.pk
www.ehsan.com.pk

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

Identified uses

Remark

It is not required to list the identified uses because the substance is exempted from the obligation to register according to REACH [Article 2 (7) in conjunction with Annex IV / V of the REACH-Regulation (EC) 1907/2006].

Uses advised against

Remark

Do not use as substitution to air pressure/or to enrich the breathing air.

Recommended intended purpose(s)

Basic
substance.
Oxidising agent.
Bleaching agent.

Details of the supplier of the safety data sheet

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SECTION 2: Hazards identification

Classification of the substance or mixture

Classification according to 67/548/EEC or 1999/45/EC

O; R8 R-phrases

8 Contact with combustible material may cause fire.

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

Hazard classes and Hazard	Hazard Statements	Classification procedure categories
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Ox. Gas 1	H270
Compr. Gas	H280

Compr. Gas H280

Hazard statements for physical hazards

H270 May cause or intensify fire; oxidiser.

H280 Contains gas under pressure; may explode if heated.

Label elements

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



GHS03

GHS04

Signal word

Danger

Hazard statements for physical hazards

H270 May cause or intensify fire; oxidiser.

H280 Contains gas under pressure; may explode if heated.

Precautionary Statements

Prevention

P220 Keep/Store away from combustible materials.

P244 Keep valves and fittings free from oil and grease.

Response

P370 + P376 In case of fire: Stop leak if safe to do so.

Storage

P403 Store in a well-ventilated place.

Hazardous ingredients for labeling oxygen

Other hazards

SECTION 3: Composition/ information on ingredients

Substances

Oxygen

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CAS No 7782-44-7
EC No 231-956-9
Index No 008-001-00-8

oxygen

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

Remove contaminated clothing immediately and dispose it safely.
Adhere to personal protective measures when giving first aid. Seek medical treatment immediately.

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

Continuous inhalation of concentrations higher than 75% may cause nausea, dizziness, respiratory difficulty and convulsion.

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.

Extinguishing media which must not be used for safety reasons no

Special hazards arising from the substance or mixture The substance / product enhances the combustion.

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.
Exposure to fire may cause containers to rupture / explode.

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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.

Eliminate ignition sources.

Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

Methods and material for containment and cleaning up Ensure adequate air ventilation.

Additional Information

Avoid oxygen rich (>23.5 %) atmospheres.

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.

Suck back of water into the container must be prevented. Use no oil or grease.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking The product is not combustible, but supports burning.

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.

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.

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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

Additional advice

Avoid oxygen rich (>23.5 %) atmospheres.

Exposure controls

Respiratory protection

Breathing apparatus in the event of high concentrations.
Keep self contained breathing apparatus readily available for emergency use.

Hand protection Leather gloves

Eye protection safety goggles

Wear goggles with suitable filter lenses when use is cutting/welding.

Skin protection

Body covering work clothing, or chemical resistant suit at increased risk.

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
pH value in delivery state	not applicable				
boiling point	-183 °C				
melting point	-219 °C				
Flash point	no				

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SECTION 10: Stability and reactivity

Reactivity

See section "Possibility of hazardous reactions".

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

May react violently with combustible materials.

May react violently with reducing agents.

Violently oxidises organic material.

Risk of inflammation in case of contact with organic substances.

Conditions to avoid

Heat sources / heat.

Incompatible materials**! Materials to avoid**

Reducing agents.

Organic substances (fats, oils).

Hazardous decomposition products

No hazardous decomposition products known.

Flammability (gas)

not
applicable

Ignition temperature

not
applicable

Lower explosion limit

no

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****Bioaccumulative potential****Mobility in soil****Results of PBT and vPvB assessment**

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

Other adverse effects

! General regulation

No known ecological damage caused by this product.

SECTION 13: Disposal considerations

Waste treatment methods

! Waste code No.

16 05 04*

Name of waste

gases in pressure containers (including halons) containing dangerous substances

Wastes marked with an asterisk are considered to be hazardous waste pursuant to Directive 91/689/EEC on hazardous waste.

Recommendations for the product

Discharge to atmosphere in a well ventilated place.

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 1072 OXYGEN, COMPRESSED, 2.2 (5.1), (E), Classification code: 10

Marine transport IMDG

UN 1072 OXYGEN, COMPRESSED, 2.2 (5.1)

EmS: F-C, S-W

Air transport ICAO/IATA-DGR

UN 1072 Oxygen, compressed, 2.2 (5.1)

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

! Other regulations (EU)

Directive 96/82/EC on the control of major-accident hazards involving dangerous substances.

Chemical Safety Assessment

For this substance a chemical safety assessment is not required.

SECTION 16: Other information

Recommended uses and restrictions

National and local regulations concerning chemicals shall be observed.

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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.

Wording of the R/H-phrases specified in chapter 3 (not the classification of the mixture!)

R 8 Contact with combustible material may cause fire.

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