

# Material Data Safety Sheet

## 1 Product and Company Identification

Article Name:	OxySure™ Portable Emergency Oxygen Generator, Model 615	
Application of the product:	Supplemental Oxygen for Emergency Use	
Manufacturer/Supplier	OxySure™ Systems, Inc 2611 Internet Boulevard, Suite 109 Frisco, TX 75034 Tel : 888-7-OXYSURE Fax : 214-618-6494 www.oxysure.com	
Emergency Information	Call CHEMTREC International	800-424-9300 (24 hrs) 703-527-3887

## 2 Composition/Information on Components

Molded Plastic Parts:	Primarily PC/ABS Blend (polycarbonate/acrylonitrile butadiene styrene)	77%
	Starex ABS	14%
	Steel, Stainless Steel, Brass	3%
	Silicone, Santoprene	2% EA
	Celcon, Lexan	~1% EA
	Nylon, polyvinylchloride (PVC)	<1% EA
User Mask and Tubing:	Latex Free Polyethylene	
Oxygen Producing Ingredients:	OxySure™ Powder	60%
	Accelerant	40%
	OxySure™ Catalyst	≤1%

## 3 Hazards Identification

As supplied, and under normal use, this product consists of a cartridge and/or a housing for the cartridge. The major component for each is PC/ABS.

Gases and fumes evolved during the thermal decomposition of this material may irritate the eyes, skin or respiratory tract.

Hazardous Materials Identification System (HMIS) Rating (scale 0 – 4):

HEALTH: 0  
FLAMMABILITY: 1  
REACTIVITY: 0  
SPECIAL HAZARD(S):

As supplied, and under normal use, the oxygen-producing ingredients are self-contained in the cartridge, and user will not make any contact with the cartridge ingredients. However, if the cartridge contents spill out as a result of accidental breakage of the cartridge:

Avoid contact with skin and eyes and inhalation of any dust.

Hazardous Materials Identification System (HMIS) Rating (scale 0 – 4):

HEALTH: 2  
FLAMMABILITY: 0  
REACTIVITY: 1

National Fire Protection Association (NFPA) Rating (scale 0 – 4)

HEALTH: 2  
FLAMMABILITY: 0  
REACTIVITY: 1

## 4 First Aid Measures

### General Information

As supplied, and under normal use, this product consists of a cartridge and/or a housing for the cartridge. The major component for each is PC/ABS. The oxygen-producing ingredients are self-contained in the cartridge. If the cartridge contents spill out as a result of accidental breakage of the cartridge:

After inhalation of dust:	Allow the victim to rest in a well ventilated area. Seek immediate medical attention.
After skin contact:	Wash immediately with plenty of water for 15 minutes. Remove contaminated clothing and shoes. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention.
After eye contact:	Flush eyes with plenty of water for 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Check for and remove any contact lenses. Do not use an eye ointment. Seek medical attention.
After Swallowing:	Wash out mouth with water provided person is conscious. Seek medical attention.

## 5 Fire fighting measures

Suitable extinguishing agents:	Water, Carbon dioxide (CO <sub>2</sub> ), dry chemical, powder, or appropriate foam.
Protective equipment:	Wear self-contained breathing apparatus and protective clothing to prevent against potentially toxic and irritating fumes and to avoid contact with skin and eyes.
Unusual Fire/Explosion Hazards:	Oxygen-generating device - the presence of oxygen can increase the rate and intensity of flame. Toxic and irritating gases/fumes may be given off during burning or thermal decomposition. If the cartridge contents spill out as a result of accidental breakage of the cartridge, contact may exacerbate an existing fire hazard.

## 6 Accidental release measures

As supplied, and under normal use, the oxygen-producing ingredients are contained within the plastic housing. If the contents spill out as a result of an accidental breakage of the plastic housing:

Avoid contact with skin and eyes and inhalation of any dust. Avoid contact of dry powder with combustible material. Use appropriate tools to put the spilled solid in a convenient waste disposal container. Avoid raising dust. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

## 7 Handling and Storage

	<b>Handling:</b>
Information for safe handling:	Handle in accordance with good industrial hygiene and safety practices.
Information about protection against explosions and fires:	No special measures required.
	<b>Storage:</b>
Requirements to be met by store rooms and receptacles:	Store at room temperature; 70°F to 86°F (21°C to 30°C). Store in cool, dry place. Do not attempt to open cartridge.
Information about storage in one common storage facility:	Not required.
	<b>Transportation:</b>
Conditions: Temperature Limits During Transportation:	Low limit: 40°F (4°C) High limit: 149°F (65°C)  If product is exposed to temperatures outside the transportation exposure limits (lower than 40°F or higher than 149°F), the cartridge must be replaced.

## 8 Exposure controls and personal protection

As supplied, and under normal use, this product consists of a cartridge and/or a housing for the cartridge. The major component for each is PC/ABS.

Additional information about design of technical systems: N/A

Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

If the cartridge contents spill out as a result of accidental breakage of the cartridge:

### Personal protection equipment:

General protective and hygienic measures: Avoid contact with eyes and skin. Use compatible chemical-resistant gloves, chemical safety goggles. Remove and wash contaminated clothing. Discard contaminated shoes.  
Avoid inhalation of dust, use government-approved respiratory filter device.  
Do not ingest.

## 9 Physical and chemical properties

### Molded plastic parts (primarily PC/ABS)

Form	Solid containing solid and liquid components
Color	Off white, gray
pH	N/A
Boiling point/range:	N/A
Flash point (PC/ABS):	608°F (320°C)
Lower Explosion Limit:	Not Established
Upper Explosion Limit:	Not Established
Vapor Pressure:	N/A
Density:	N/A
Specific Gravity:	N/A
Solubility in Water:	Insoluble
Autoignition Temperature:	900 °F (482°C)
Decomposition Temperature:	531 °F (277°C)
Softening Point:	392°F (200°C)
Bulk Density:	N/A

### Oxygen producing Ingredients: OxySure™ Powder

Form	Coarse Powder
Appearance	Free flowing white granular powder
Color	White
pH	10.0 ± 1
BP/BP Range	N/A
MP/MP Range	N/A
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
Bulk Density	N/A
Odor Threshold	N/A
Volatile%	N/A
VOC Content	N/A
Water Content	N/A
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Surface Tension	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point	N/A
Explosion Limits	N/A

Flammability	N/A
Autoignition Temp	N/A
Refractive Index	N/A
Optical Rotation	N/A
Miscellaneous Data	N/A
Solubility	N/A

N/A= Not Available

## 10 Stability and reactivity

As supplied, and under normal use, this product consists of a cartridge and/or a housing for the cartridge. The major component for each is PC/ABS.

Hazardous Reactions: Hazardous polymerization does not occur

Stability: Stable

Materials to avoid: None known

Conditions to avoid: None known

### Hazardous decomposition products

By Fire and Thermal Decomposition: Carbon Dioxide (CO<sub>2</sub>); water; styrene; acrylonitrile; hydrogen cyanide; carbon monoxide, hydrocarbons

### Dangerous Reactions:

Dangerous products of decomposition: No dangerous decomposition products known.

As supplied, and under normal use, the oxygen-producing ingredients are self-contained in the cartridge. If the cartridge contents spill out as a result of accidental breakage of the cartridge:

Materials to avoid: Strong reducing agents, strong acids, organic materials, salts of metals, flammable substances.

Conditions to avoid: Extreme Heat or Flame

## 11 Toxicological information

As supplied, and under normal use, this product consists of a cartridge and/or a housing for the cartridge. The major component for each is PC/ABS.

Skin Irritation: Rabbit, Draize, Non-irritating

Eye Irritation: Rabbit, Slightly irritating

Sensitization: Dermal: Non-sensitizer (Guinea pig, Buehler Test)

Repeated Dose Toxicity: 28 days, Oral: NOAEL: 1.862 mg/kg (rat, Male/Female, daily)

Mutagenicity: Genetic Toxicity in Vitro: Ames: Negative results were reported in various in vitro studies

As supplied, and under normal use, the oxygen-producing ingredients are self-contained in the cartridge. If the cartridge contents spill out as a result of accidental breakage of the cartridge:

Routes of Entry: Eye contact. Inhalation. Ingestion

Acute Toxicity (oral): LD50 1.9g/kg ~ 3g/kg

Irritation: Eye, skin, mucous membrane

## 12 Ecological Information

As supplied, and under normal use, this product consists of a cartridge and/or a housing for the cartridge. The major component for each is PC/ABS.

Biodegradation: Not readily biodegradable

Bioaccumulation: Does not bioaccumulate

Acute and Prolonged Toxicity to Fish: LC50: 18 mg/L (Common Carp (Cyprinus caprio, 96 hrs))

As supplied, and under normal use, the oxygen-producing ingredients are self-contained in the cartridge. If the cartridge contents spill out as a result of accidental breakage of the cartridge:

### General notes:

There is a limited amount of ecological data available on the oxygen-generating ingredients of this product.

## 13 Disposal considerations

### Product:

Recommendations: Spent disposable cartridge can be placed in household trash. Do not attempt to open spent cartridge. If/where applicable, do not dispose of a cartridge that is unactivated - return unactivated cartridges to OxySure™.

## 14 Transport Information

Consumer Product. Contains consumer quantities of oxygen-producing ingredients. No special labeling requirements.

## 15 Regulatory Information

Product is intended to supply medical oxygen for emergency use. FDA approval number K052396.

As supplied, and under normal use, this product consists of a cartridge and/or a housing for the cartridge. The major component for each is PC/ABS.

OSHA Hazcom Standard Rating: Non-Hazardous

US Toxic Substances Control Act: Listed on the TSCA Inventory

US EPA CERCLA Hazardous Substances (40 CFR 302; Components): None

SARA Section 311/312 Hazard Categories: Non-hazardous under Section 311/312

US EPA Emergency Planning and Community Right-To Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 SCR 355, Appendix A; Components): None

US EPA Emergency Planning and Community Right-To Know Act (EPCRA\_ SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) – Supplier Notification Required (Components): None

US EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261):

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24).

## 16 Other Information

Department issuing MSDS: OxySure™ Systems, Inc.

Contact: Director of Research

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