

# Material Safety Data Sheet

## 1 Product and Company Identification

Article Name:	OxySure <sup>®</sup> Model 615 Emergency Oxygen System	
Application of the product:	Supplemental Oxygen for Emergency Use	
Manufacturer/Supplier:	OxySure <sup>®</sup> Therapeutics, Inc. 10880 John W. Elliott Drive, Suite 600 Frisco, TX 75033 Tel: (+1) 888-7-OXYSURE Fax: (+1)972-294-6501 www.oxysure.com	
Emergency Information:	Call CHEMTREC (24 hrs) International	(+1) 800-424-9300 (+1) 703-527-3887

## 2 Composition/Information on Components

Molded Plastic Parts:	Primarily Polycarbonate and PC/ABS	
	Polycarbonate	44%
	PC/ABS	28%
	Starex ABS	12%
	Steel, Stainless Steel, Brass	4%
	Celcon, Polypropylene, Silicone, Nylon Celenex, Polyethylene, PVC	<2% EA <1% EA
User Mask and Tubing:	Latex Free Polyethylene, PC, LDPE, PVC	>80%
	Filter Elements	15%
Oxygen Producing Ingredients:	OxySure <sup>®</sup> Powder	60%
	Accelerant	40%
	OxySure <sup>®</sup> Catalyst	≤1%

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

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 replacement 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 disposable cartridge and/or an outer housing for the cartridge. The major component of the outer housing is PC/ABS. The major component of the cartridge is polycarbonate. The oxygen-producing ingredients are self-contained in the cartridge. If the cartridge contents – a watery salt – 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 water for 15 minutes. Ensure 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:	If conscious, wash out mouth with water. 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 irritating fumes and to avoid contact with skin and eyes.
Unusual Fire/Explosion Hazards:	Oxygen-producing device - the presence of oxygen can increase the rate and intensity of flame. 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 disposable plastic cartridge. If the contents spill out as a result of an accidental breakage of the plastic replacement cartridge:

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:	Upper Limit: 160°F (71°C)  If product is exposed to temperatures of greater than 160°F, the replacement cartridge must be replaced.

## 8 Exposure controls and personal protection

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

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 Polycarbonate parts

Form: Solid  
Color: various  
Boiling point/range: N/A  
Flash point: N/A  
Vapor Pressure: N/A  
Density: 1.19-1.23 g/mL  
Specific Gravity:  
Solubility in Water: Insoluble  
Autoignition Temperature: N/A

### Molded PC/ABS parts

Form: Solid containing solid and liquid components  
Color: Off white, gray, black  
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 disposable cartridge and/or an outer housing for the cartridge. The major component of the outer housing is PC/ABS. The major component of the cartridge is polycarbonate.

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 disposable cartridge and/or an outer housing for the cartridge. The major component of the outer housing is PC/ABS. The major component of the cartridge is polycarbonate.

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 disposable 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 disposable cartridge and/or an outer housing for the cartridge. The major component of the outer housing is PC/ABS. The major component of the cartridge is polycarbonate.

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 disposable 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-producing ingredients of this product.

## 13 Disposal considerations

### Product:

Recommendations: Cartridges can be placed in household trash. Do not attempt to open cartridge. Place unactivated cartridges in plastic bag/container prior to disposing in household trash. If activated, leave mask attached, do not remove mask. Discard entire cartridge and mask in household trash.

## 14 Transport Information

Consumer Product. Contains consumer quantities of oxygen-producing ingredients. The product is considered Dangerous Goods: UN 3356, Oxygen Generator, Chemical, 5.1, II.

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

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

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<sup>®</sup> Therapeutics, Inc.

Contact: Director of RAQA  
(972) 294-6551

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