



ROG RUGGED OXYGEN GENERATOR



APPLICATIONS

The Rugged Oxygen Generator (ROG) is a chemical oxygen generator. It is a single use, non prescription and non sterile device. It can quickly and safely be administered to treat patients/casualties requiring supplementary oxygen at point of injury.

HOW IT WORKS

The device is initiated with an integrated brass starter that is accessible beneath the cap. To start the device, open the lid and turn the dial clockwise 2-3 complete turns. This will start the chemical reaction that produces medical oxygen. Once oxygen is flowing, close the lid and place mask on patient.

The gas exit port is design to BS EN 13544 2:2002+A1:2009 Respiratory therapy equipment - Part 2: Tubing and connectors standard. Consult Instructions for Use for step-by-step guidance on how to start the ROG.

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PHYSICAL CHARACTERISTICS

| | |
|-----------------------|-----------------------|
| Depth x width (mm/in) | 119 x 118 / 4.7 x 4.6 |
| Height (mm/in) | 284 / 11.1 |
| Weight (kg/lb) | 2.45 / 5.4 |

PERFORMANCE

| | |
|---|-------------------------|
| Oxygen generation (litres) | ≥ 90 |
| Minimum delivery duration (minutes) | 15 |
| Average flow rate (litres per minute) | ≥ 6 |
| Purity of oxygen (%) | ≥ 96 |
| Carbon dioxide (max average. ppm) | 300 |
| Chlorine (max average. ppm) | 0.2 |
| Operating & storage temperature range (°C/°F) | -18 to 40 / -0.4 to 104 |
| Outer temperature of unit (°C/°F) | ≤ 45 / 113 |
| Starter mechanism | Integrated |
| Shelf life (years) | 3 |

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PROPERTIES

- Self-contained chemical generator requires no maintenance during storage
- Produces a minimum of 90 litres of medical oxygen @NTP over a minimum of 15 minutes
- Handheld operation
- Unpressurised and non-explosive
- Tested in accordance with MIL-STD-810G/H

| Test | Test Standard | Test Parameters |
|---|---|--|
| Vibration | MIL-STD-810G/H, Method 514.8, Procedure I | 60 minutes (per axis) 5-500 Hz rms = 1.17 g |
| High Temperature | Tailored from MIL-STD-810G, Method 501.5, Procedure III | Humidity \leq 20% Duration 20 hours Temp 40°C (+/-2°C) / 104°F (+/- 35.6°F) |
| High Humidity and High Temperature | Tailored from MIL-STD-810G, Method 507.5 | 29.5°C (+/- 2°C) / 85.1°F (+/- 35.6°F) with 95 percent RH (+/- 2%) and 41°C (+/- 2°C) / 105.8°F (+/-35.6°F) with 88 percent RH (+/- 2%) |
| Low Temperature | Tailored from MIL-STD-810G, Method 502.5, Procedure II | 20 hours duration at -18°C (+/-2°C) / -0.4°F (+/-35.6°F) |
| Altitude | MIL-STD-810G, Method 500.5, Procedure II | Tested at 10,000, 15,000 and 20,000 ft |
| Blown Sand | MIL-STD-810G, Method 510.6, Procedure II | Concentration 2.2 g/m ³ , Velocity 19 m/s, Temperature 60°C / 140°F, Humidity <30%RH, Test duration 2x90 minutes, Total 3 hours |
| Blown Rain | MIL-STD-810G, Method 506.6, Procedure I | Rainfall rate 4"/Hr with wind speed 40 mph, Duration of 30 minutes on 2 face (top and bottom) |
| Operational Drop Test | MIL-STD- 810G, Method 516.6, Procedure IV | Drop height 0.9m / 3ft |
| Mechanical Shock | MIL-STD-810G, Method 516.7, Procedure I | 40g 11ms (Ground vehicle level) and 20g 11ms (Flight level) TPS shock pulse |

ADDITIONAL INFORMATION

Packaging, transportation & disposal

Oxygen generators are classified as hazardous UN 3356, class 5.1 oxidiser, packed to meet the standards of packing group II, and are packed in accordance with IATA regulations for airfreight (not passenger aircraft) or IMDG regulations for sea freight (special rules apply in the USA).

If possible, recycle to approved recycling company. If not (e.g., designated as waste), dispose of in accordance with national and local authority regulations, e.g. The Hazardous Waste (England & Wales) Regulations 2005. Refer to SDS for information on chemical composition.

Quality

Molecular Products Ltd's aim is to manufacture chemical products which satisfy completely the needs of our customers. All products are rigorously tested to ensure conformance to the specification. Our activities comply to the requirements of ISO 9001.

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