

# MineARC Systems Rugged Oxygen Generator (ROG)

The Rugged Oxygen Generator (ROG) is a portable, lightweight oxygen generator that delivers 90 litres of breathable oxygen for 15 minutes. Easy-to-use and small enough to carry in a backpack, the ROG gives immediate access to a potentially life saving oxygen supply.

Oxygen is produced by the thermal decomposition of sodium chlorate within the ROG. This decomposition requires a significant amount of energy input to drive the chlorate decomposition. The source of this energy is the oxidation of iron powder (formulated with the sodium chlorate as a fuel). The initial energy input from the interaction between chlorate and primer is generated by the initiation mechanism, in this case a phosphorous match.

## Major Features

- Oxygen producing chemical utilised: Sodium chlorate
- Self contained chemical oxygen generator requires no maintenance during storage
- Unit activated via an integrated phosphorous match
- Produces a minimum of 90 litres of breathable oxygen @ NTP over approximately 15 minutes
- Associated with a high degree of safety due to the absence of pressurised gases
- Resistant to shock and vibration
- Suitable for use at altitudes of up to 20,000 feet
- Portable and easy to use
- Handheld operation
- Unpressurised and non-explosive
- Cool flow gas technology

## Product Specifications

|                                       |                |
|---------------------------------------|----------------|
| Depth x width                         | 115mm          |
| Height                                | 284mm          |
| Weight                                | 2.3kg          |
| Outer temperature of unit             | ≤ 45°C         |
| Oxygen generation                     | ≥ 90L          |
| Minimum delivery duration             | 15 minutes     |
| Purity of oxygen                      | ≥ 99.5%        |
| Carbon monoxide                       | 5ppm average   |
| Carbon dioxide                        | 300ppm average |
| Chlorine                              | 0.2ppm average |
| Operating & storage temperature range | -13 to 40°C    |
| Starter mechanism                     | Integrated     |
| Average flow rate                     | ≥ 6 L/min      |
| Shelf life                            | 3 years        |

