

TECHNICAL DATA SHEET

MilSpec MPOG Mk II

NSN 3655 99 503 4575



Chemical oxygen generator providing 2600 litres of breathable oxygen

Applications

Safe supply of oxygen for critical life support in Submarine applications

Dimensions

Depth x width (mm)	133 x 133
Height (mm)	400
Weight (kg)	12.2 +/- 0.5
Stowage volume (litre)	7



Properties

The oxygen producing chemical is sodium chlorate.

- MilSpec MPOG Mk II oxygen generators require no maintenance during storage
- Associated with a high degree of safety
- MPOGs are packed in an airtight stainless steel canister to protect from contaminants
- Ignition source – phosphorous match (supplied separately)
- Short time from stowage to operation
- Approx. 2.5 MJ of energy released per generator

How it Works

Oxygen is produced by the thermal decomposition of sodium chlorate. 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 ignition source is generated by the initiation mechanism, in this case a brass starter.






MilSpec MPOG Mk II

Specifications	Stowage	In Use
Depth x width (mm)	c133 x 133	c128 x 128
Height (mm)	c400	c385 (418 including starter)
Weight (kg)	12.2 +/- 0.5	
Storage volume (litre)	c7	
Oxygen generation (litre)		2600 @ NTP +/- 100
Delivery duration (minutes)		60 - 90
Purity of oxygen (%)		> 98
Carbon monoxide (max. ppm)		< 50
Carbon dioxide (max. ppm)		< 1000
Chlorine (max. ppm)		0.1
Sodium chloride - salt (max. mg/l)		< 10
Starter mechanism (not interchangeable)	Brass starter supplied separately	

Additional Information		
Number of generators per stillage	Gross weight of stillage (kg)	Dimensions of Stillage (W x D x H) cm
25 (unless otherwise stated)	380	80 x 80 x 70
<p>Packaging, Transportation and Disposal</p> <p>The units are not shipped with the brass starter mechanism. The units are classified as hazardous UN 1479 oxidising solid NOS, class 5.1 oxidiser, packing group II, and are packed in accordance with IATA regulations for air freight (not passenger aircraft) or IMDG Regulations for sea freight.</p> <p>Spent oxygen generators are classified as non-hazardous and can be disposed of to landfill by a specialist waste contractor. Contact Molecular Products regarding the disposal of damaged or used devices, as these are still classified as oxidisers 5.1 hazardous material.</p> <p>NSN number of brass starter mechanism: 1375-99-667-8543</p> <p>Quality</p> <p>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 with the requirements of ISO 9001.</p>		

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