

MILSPEC MPOG MKII

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

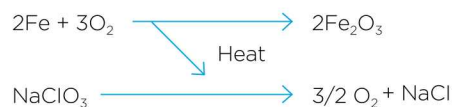
PROPERTIES

The oxygen producing chemical is sodium chlorate.

- MilSpec MPOG MkII oxygen generators require no maintenance during storage
- Associated with a high degree of safety
- MilSpec MPOGs are packed in an airtight stainless steel canister to protect from contaminants
- Ignition source - phosphorous starter (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.



Molecular Products Limited

Parkway, Harlow Business Park
Harlow, Essex,
CM19 5FR, UK

T +44 (0)1279 445111
E sales@molprod.com
W www.molecularproducts.com

SPECIFICATIONS	STOWAGE	IN USE
Depth x width (mm)	133 x 133	c128 x 128
Height (mm)	400	c385 (418 including starter)
Weight (kg)	12.2 +/- 0.5	
Storage volume (litre)	7	
Oxygen generation (litre)		2600 @ NTP (20°C (293.15K, 68°F) and an absolute pressure of 1 atm (14.696psi, 101.325 kPa)) +/- 100 a
Delivery duration (minutes)		55 - 95
Carbon monoxide (max. ppm)		< 50
Carbon dioxide (max. ppm)		< 1000
Chlorine (max. ppm)		0.1
Starter mechanism (not interchangeable)		Brass starter supplied separately

ADDITIONAL INFORMATION

Packaging, Transportation & Disposal

The Milspec MPOG and brass starter are shipped in separate packages. 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.

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.




NSN number of brass starter mechanism: 1375-99-667-8543

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 with the requirements of ISO 9001.

Molecular Products Limited

Parkway, Harlow Business Park
Harlow, Essex,
CM19 5FR, UK

 +44 (0)1279 445111
 sales@molprod.com
 www.molecularproducts.com