# MilSpec MPOG Mk II



# Chemical oxygen generator providing 2600 litres of breathable oxygen

The MilSpec MPOG Mk II is a single use, self-contained oxygen generator that produces 2600 litres of breathable oxygen over a 60 to 90 minute period. It is the responsibility of the end user to ensure that the units are suitable for the intended application and that written procedures and proper training is given to all users of the product. Further guidance and training options are available on request from Molecular Products.

# Safety

- Store in a clean, dry environment away from sources of heat
- Do not allow contamination by organic materials such as oil or grease. Contaminated generators MUST NOT BE USED
- Avoid contact with the generator once started. The generators run with a high surface temperature once initiated and will burn skin on contact or ignite flammable materials
- The generators should ONLY be used by trained personnel under controlled conditions. Incorrect use can lead to pressurisation of sealed space and the production of high oxygen content environments

## Initiation

- 1. Consult Navy issued operating procedures for use on-board to determine location(s) for initiation and number of units recommended
- 2. Confirm the external steel case is in good condition. DO NOT USE if contaminated or damaged
- 3. Confirm the unit is within its shelf life. DO NOT USE out of date units
- 4. Open the outer case using the supplied key. Use the metal handle to lift the unit from the outer tin
- 5. Check the generator body for contamination or damage. No dents or contamination with any foreign material are acceptable. Check the moisture indicator (located in the T shaped handle) - if this is orange DO NOT USE. If damaged or contaminated DO NOT USE
- 6. Remove cap by lifting T-shaped handle to break the seal There may be a build-up of gas that will release as the seal is broken. Once the seal has been broken the tear off disc can be moved easily by pulling away from the unit
- Insert corner of T shaped handle into the slot of the brass plug. Unscrew and remove the brass plug





- 8. Place oxygen generator in the designated holder or location see Navy issued operating procedure
- 9. Remove the brass starter from its protective packaging taking care to avoid contact or damage to the red phosphorus starter end
- 10. Carefully insert the threaded brass starter one half turn into the top of the generator body ensuring the thread is engaged and the t-bar is in the lower position. Remove and repeat if the thread is not properly engaged. The unit will start as the starter is screwed further into the unit body
- 11. Screw the brass starter fully into the top of the generator until it will go no further. The generator will start producing oxygen during this operation, although this may not be immediately apparent





12. A slight hiss may be heard and the metal will start to warm up and get hot during the first few minutes of operation. This indicates that the unit is

functioning correctly. Beware that the unit will get progressively hotter during the first few minutes of operation and may burn flammable materials

 After approximately 90 minutes the oxygen flow will stop, but the unit will remain very hot for some considerable time. AVOID CONTACT WITH HOT UNITS

If a unit fails to start – that is, the top of the unit does not start to get hot after the first 5 minutes of operation – then carefully remove the brass starter and quarantine the unit. To remove the brass starter complete one full turn anti-clockwise then leave for a minimum of 5 minutes. If after this there is still no reaction from the MPOG, fully unscrew and remove the brass starter. If the unused MPOG is transported with the brass starter in place then there is the potential for initiation to occur during transportation.

Any unit damaged or contaminated must also be quarantined and MUST NOT BE RE-USED.

#### Disposal

Contact local specialist waste contractors for guidance on disposal of used, part-used or damaged oxygen generators. Part-used or damaged oxygen generators are still classified as Oxidizers 5.1 hazardous material. After use the chemical block consists primarily of sodium chloride and iron oxide.

## Conditions of use and limit of liability

The MilSpec MPOG self-contained oxygen generator is intended as a single-use source of breathable oxygen. The unit is designed to be used by trained personnel following Navy issued operating procedures. It is the responsibility of the end user to ensure the generators are used in a safe manner and can provide the required level of oxygen under the intended conditions of use.

#### Transport

The generator block is supplied and transported as a UN1479 Oxidizer block. It does not form an oxygen generator until the other component (brass starter) necessary for its use is present. The brass starters are supplied separately and are not despatched within the same packaging as the Oxidizer blocks.

#### Oxidizer block:

Proper shipping name: UN 1479 Oxidizing solid NOS (contains Sodium Chlorate & Barium Peroxide). Transport classification: Oxidizer. Hazard classification: 5.1. Packing Group: II

#### Brass starter:

Contains 0.1g Phosphorous Amorphous (UN1338) per starter. Exempt from regulation as per IATA 2.6.10 'De Minimis'.

Molecular Products Ltd

Parkway, Harlow Business Park Harlow, Essex, CM19 5FR, UK ╅ +44 (0)1279 445111

**F** +44 (0)1279 401231