

Emergency oxygen for scuba diving injuries

Delivery Device	Flow Rate	Inspired Fraction+
Oronasal mask (no reservoir bag)	10 lpm	≤ 0.5-0.6 (50%-60%)*
Non-rebreather mask	10-15 lpm	≤ 0.8 (80%)**
Bag valve mask	15 lpm	≤ 0.9–0.95 (90%–95%)
Demand valve	N/A	≤ 0.9–0.95 (90%–95%)

* May vary with respiratory rate

** Less variation with changes in respiratory rate

+ Delivery fractions vary with the equipment and techniques used. This table summarises various oxygen-delivery systems and potential values of inspired oxygen with their use.

WARNING

- Use of DAN Oxygen Equipment requires appropriate oxygen provider training
- Misuse of this equipment may result in further serious injury or death
- Avoid using this equipment without proper training

Contact DAN-SA for information on oxygen training





DAN-SA Hotline 0800 020 111 (local) | +27 828 10 60 10 (int.)



Emergency oxygen for scuba diving injuries

02 REGULATOR

- 1. Place cylinder in up-right position.
- 2. Check for the O_2 washer placement for the pin-indexing component.
- 3. Slide regulator down from the top of the valve and align the two pins to match holes on valve.
- 4. Slowly tighten T-handle until regulator is snug on valve.

DEMAND VALVE AND MANUALLY TRIGGERED VENTILATOR

- 1. Attach hose to one of the DISS threaded outlets on the regulator.
- 2. Attach demand valve or MTV to other end of hose.
- 3. Attach pocket mask to regulator.
- 4. Attached handwheel wrench to top of valve.
- 5. Slowly open valve of O₂ cylinder and listen for gas leaks.
- 6. If a gas leak is detected, turn off valve and check hoses and O, washer.
- 7. Slowly open valve again.

Semble Dicimient

- 8. Test function by inhaling from mask and exhale away from mask.
- 9. Place mask on the injured diver's face to breathe on demand. Ensure and maintain a proper seal.

NON-REBREATHER MASK

- 1. Remove non-rebreather mask from packaging.
- 2. Stretch out clear tubing.
- 3. Attach end of oxygen tubing to continuous flow outlet barb on the underside of the regulator.
- 4. Attach handwheel wrench to top of valve.
- 5. Slowly open valve of O₂ cylinder and listen for gas leaks.
- 6. If gas leaks are detected, turn off valve and check hoses and O_2 washer.
- 7. Slowly open valve again.
- Activate O₂ flow by turning the constant-flow controller until it reads 10-15 lpm.
- 9. Allow the reservoir bag to fill.
- 10. Place mask on injured diver's face to breathe on demand. Ensure and maintain a proper seal.
- 11. Adjust the flow to keep the reservoir bag 1/3 full when the injured diver inhales.

NOTE: All hose connections are hand tightened. No wrenches are used.







DAN-SA Hotline 0800 020 111 (local) | +27 828 10 60 10 (int.)