



Mixed Gas (Trimix)



Overview

This program provides the training required to undertake dives with breathing mixes containing Helium and using Nitrox and / or Oxygen for staged decompression. The Mixed Gas diver program is broken down into 3 phases with depth increments of 60, 75 & 100 meters. Each phase requires a minimum of 2 dives with at least 1 dive reaching within 3 meters of the depth for that level. The level 1 course costs £475 each for 2 divers or £665 1 to 1.

Student Pre-Requisites

The student must:

- Be a minimum age of 18.
- Have a minimum certification of Advanced Nitrox Decompression Diver or equivalent (Extended range recommended).
- Show proof of at least 100 logged dives with 30 deeper than 30meters.

Equipment

The following equipment is required for each student in addition to their normal Scuba set up. Students can hire equipment they do not have their own from 3D Diving.

- 2 primary cylinders configured as a twin set with volume appropriate for planned dive and gas consumption.
- 2 Decompression cylinders. 7lt minimum for level 1, 10lt for level 2.
- Dive computer or depth gauge and automatic bottom timer with back up.
- Regulators for both primary & Deco cylinders.
- BCD with adequate lift for equipment configuration, wing recommended.
- Reel with delayed surface marker buoy.
- Exposure suit adequate for the UK environment.
- Torch.
- Underwater slate.

Subject Areas

The PSA Mixed Gas Manual is provided for this program. The first level of the program will require the complete academic session. The second and Third levels will require review of specific information and techniques for each depth level. The following topics are covered:

- History of mixed gas diving.
- Physical principles of mixed gas diving.
- Physiology of mixed gas diving.
- Decompression procedures review.
- Advanced Diving equipment review.
- Decompression software and mixed gas dive planning.

In order to complete each level, students must satisfactorily complete the PSA Mixed Gas written examination applicable to that level.

Skill Performance Requirements

The following open water skills must be completed by the student during open water dives safely and efficiently at each level of the program:

- Demonstrate adequate pre-dive planning.
- Conduct the planned dives within all pre-determined limits.
- Perform decompression stops and gas switches whenever and wherever mandated.
- Demonstrate the correct deployment of a delayed SMB in less than 1 minute.
- Perform at least 1 dive with a switch from travel to bottom mix during descent at the correct depth.