



CMAS

CONFÉDÉRATION MONDIALE
DES ACTIVITÉS SUBAQUATIQUES

WORLD UNDERWATER FEDERATION

CMAS Recreational Trimix Diver

Standards and Requirements

(Version 2009/06-Working)

CMAS Standard Recreational TRIMIX

Course Outline

Course Classification (Type and level)

1. Classification

This CMAS Recreational Trimix Diver course is a specialty course, which can only be undertaken after satisfying the entry standards as set out below.

2. Course entry qualifications

- Minimum age 16 years.
- Diving qualification: 2-Star diver CMAS or equivalent CMAS NITROX Diver or equivalent qualification from a recognized diver training agency.
- Minimum number of logged qualifying dives: Candidates must show proof of a minimum of 50 logged dives plus a minimum of 10 Nitrox dives.
- Medical declaration: Candidates must provide a medical declaration of fitness to dive, as set out by their National Federation.
- Equipment: Candidate will provide all necessary diving equipment to complete this course (see suggest list below).

3. Target audience:

This CMAS Recreational Trimix Diver course is targeted, at the group of sports divers who want to be able to dive to a maximum of 50 meters and remain within a proper degree of safety. Limiting the END to 25 meters is the key here.

4. Qualification term

This CMAS qualification has no expiry date subject to national standards (including medical status).

5. Qualification Limits

Graduates are qualified to dive:

- Using so-called Normoxic Trimix gas with a minimum of 21% Oxygen
- To a maximum operating depth (MOD) of 25 meter, subject to a ppO₂ maximum of 1.4bar
- Without planned deco-stop except from Safety Stops with is strongly recommended.
- Recommended mixture at maximum depth is Trimix 24/30

6. Course documentation

Instructor will provide all necessary course documentation.

Aims & objectives of the training

- To provide the candidate with a clear understanding of subject matter related to Recreational Trimix diving including the practical use of the additional diving and associated equipment.
- To provide a clear understanding of the psychological and physiological aspects of diving at the limits of traditional sports diving.
- To provide a clear understanding of the physical and physiological aspects of adding Helium to ones breathing gas.
- To provide a clear understanding of the extended dive planning required for Recreational Trimix diving
- To provide a clear understanding of the additional risk associated with deep diving including knowledge about how to asses and mitigate risks

Instructor / candidate Ratio:

Theory/classroom: Instructor / Candidates maximum ratio 1:8

Practical/open water: Instructor / Candidates maximum ratio 1:3

Requirements of the instructor

- Minimum CMAS Recreational Trimix Instructor
- National Qualifications: Instructor must have a valid instructor classification according to the requirements of his/her National Organisation or CDC.

Personal Equipment

- All equipment used must well maintained and fit for the purpose.
- Oxygen Service: Candidates will provide certification to prove that all:
 - Equipment for use with gas mixtures other than air is in "oxygen service",
- Dive cylinders are in "test".

Course Facilities:

- A Class room suitable to match the needs of the course and number of candidates.
- Open water diving locations suitable for the training needs

Course outline

8.1 Theoretical topics

8.1.1 Basic trimix knowledge

8.1.2 END calculations

8.1.3 Repetition of best mix calculations

8.1.4 Trimix safety issues

8.1.5 Trimix dive planning

8.1.6 Use of trimix computer

8.1.7 An introduction to trimix blending

8.1.8 Trimix Gas Analysis

8.1.9 Practical Trimix diving

8.2 Practical topics

8.2.1 Dive to a maximum of 30 meters using light trimix mixture

8.2.2 Dive to a maximum of 48 meter using trimix mixture

9. Aims of the participants

At the end of the course, candidates must be able to demonstrate the required knowledge and skills related to

Recreational Trimix diving to the satisfaction of the Course Leader as follows:

8.1 Sit and pass the Recreational Trimix theory examination.

8.2 Demonstrate, through application, a thorough understanding of the diving planning process {i.e. all trainees

will plan their own dives; these plans will assessed by the Course Leader}.

8.3 Complete all the Recreational Trimix in-water Skills to the satisfaction of the CMAS Trimix Course Leader.

10. Minimum course duration

Theory/practical lectures: 4 hours

Open water dives: 2 dives with a minimum duration of 30 min each