

Unit 1: *Introduction*

- **What is Nitrox**
- **A Bit of History**
- **Why Dive with Enriched Air Nitrox**
- **Common Misconceptions About Nitrox**
- **Terminology**

WORLDWIDE
DIVE SAFETY THROUGH EDUCATION

Student Performance:

By the end of the lesson you will be able to:

- **Describe what nitrox is.**
- **List other names for nitrox.**
- **State the early history of diving with gases other than air.**
- **State when NAUI sanctioned nitrox diving.**
- **Describe what nitrox is not.**

What is Nitrox?

- **Nitrox is air in which fraction of nitrogen is reduced**
- **Nitrox is also called:**
 - **Oxygen-enriched air**
 - **Enriched air nitrox**
 - **EAN_x**
- **Reducing Nitrogen**
- **Increasing Oxygen**

A Bit of History

- **Development of nitrox use**
 - **Early research and use**
 - **Controversy**
 - **NAUI endorsement of EAN_x**
 - **NAUI Standards for EAN_x training**



Why Dive With Enriched Air Nitrox

- Extended Dive Time

Maximum Dive Times (in minutes)							
Depth fsw	Depth msw	Air		EAN ₃₂		EAN ₃₆	
		NAUI Tables	NAUI RGBM	NAUI Tables	NAUI RGBM	NAUI Tables	NAUI RGBM
60	18	55	55	100	85	100	115
70	21	45	40	60	60	60	85
80	24	35	30	50	47	60	60
90	27	25	25	40	38	50	46
100	30	22	20	30	30	40	35
110	33	15	16	25	25	30	31

Why Dive With Enriched Air Nitrox continued

- Repetitive dive times and surface intervals
- Safety margins and post dive fatigue

Comparison of Dive Plans using Air and EAN36

Diver 1: Air		Diver 2: EAN ₃₆	
NAUI Dive Tables	NAUI RGBM Tables	NAUI Dive Tables	NAUI RGBM Tables
First Dive 80 feet/24 meters Dive Time: 30 minutes Ending Group: G	First Dive 80 feet/24 meters Dive Time: 30 minutes	First Dive 80 feet/24 meters Dive Time: 30 minutes Ending Group: F	First Dive 80 feet/24 meters Dive Time: 30 minutes
One hour surface interval Entering Group: F	One hour surface interval	One hour surface interval Entering Group: E	One hour surface interval
Second Dive 55 feet/17 meters Max. Dive Time: 19 minutes	Second Dive 55 feet/17 meters Max. Dive Time: 55 minutes	Second Dive 55 feet/17 meters Max. Dive Time: 62 minutes	Second Dive 55 feet/17 meters Max. Dive Time: 115 minutes

Common Misconceptions About Nitrox

- **Myth 1: “Nitrox is for technical diving.”**
- **Myth 2: “Nitrox is for deep diving.”**
- **Myth 3: “If you dive with nitrox you won’t get bent.”**
- **Myth 4: “Nitrox is safer than air.”**
- **Myth 5: “If you dive with nitrox you won’t get narcosis.”**
- **Myth 6: “It is hard to dive with nitrox.”**

Terminology

- **New and unfamiliar terms**
- **Interchangeable terms**
- **Percentages or fractions**
- **Ambiguous terms**

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End of Unit 1

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