# Oxygen $O_2$

**General characteristics:** A colorless, nonflammable, and odorless gas. Sustains combustion of many materials which normally cannot burn in air. Increases the combustion rate when compared to air.

**TLV-TWA:** None established
**Flammable limits:** Strong oxidizer
**Molecular weight:** 32.0
**CGA valve outlet:** 540/180

**DOT class:** 2.2 (Nonflammable Gas)
**DOT label:** Nonflammable Gas, Oxidizer
**Specific volume:** 12.1 $ft^3$/lb. at 70°F
**Specific gravity (Air = 1):** 1.105 at 77°F
**Material recommendation:** Copper, brass, nickel alloys, steel, and stainless steel. All equipment must be cleaned for oxygen service.
**CAS No.** 7782-44-7
**UN No.** 1072

| Product / *Code* | Purity | Cylinder Size | SAP | Volume SCF | Pressure @70°F PSIG | Equipment Recommendation Ordering Information on Reference Page |
|---|---|---|---|---|---|---|
| **Oxygen** Scientific | 99.9999% | 049 | 10549 | 337 | 2640 | To maintain research gas quality at the point of use see research gas system page 139. Two stage stainless steel regulator, see page 148. Single stage stainless steel regulator, see page 146. |
| **Oxygen** Research *432000* | 99.999% | 049<br>044<br>002 | 7256<br>7254<br>7246 | 337<br>225<br>4 | 2640<br>2000<br>1800 | |
| **Oxygen** Ultra high purity *404200* | 99.995% | B12<br>049<br>044 | 4194<br>4152<br>4094 | 4044<br>337<br>225 | 2640<br>2640<br>2000 | To maintain high purity quality at the point of use see high purity gas system page 139. Single stage gas supply panel, see page 172. |
| **Oxygen** Zero *404300* | 99.98%<br><0.5 ppm THC | B12<br>049<br>044<br>LBS | 4358<br>4304<br>4278<br>4358 | 4044<br>337<br>225<br>2 | 2640<br>2640<br>2000<br>1800 | Two stage high purity regulator, see page 148. Single stage high purity regulator, see page 146. Lecture bottle regulator, see page 162. Lecture bottle control valve, see page 210. |
| **Oxygen** Extra dry *404400* | 99.6% | 049<br>044<br>016<br>LBS | 4528<br>4464<br>4428<br>4562 | 337<br>225<br>86<br>2 | 2640<br>2000<br>2000<br>1800 | |

**Available in tube trailer quantities and 12 cylinder pallet banks.**