

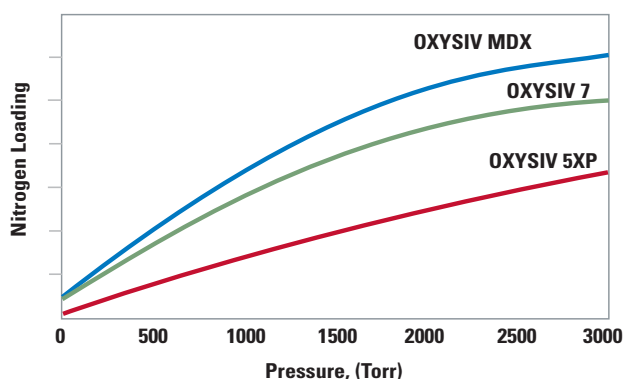


## UOP OXYSIV™ MDX Adsorbent

### Adsorbents

#### Description

UOP OXYSIV MDX adsorbent is a patented product specifically designed for use in medical oxygen concentrators that employ a pressure or vacuum swing cycle for generation of high purity oxygen. OXYSIV MDX adsorbent is the highest nitrogen capacity product in UOP's molecular sieve portfolio. Co-adsorption of oxygen has been minimized which improves the overall selectivity for nitrogen over oxygen. UOP's proprietary manufacturing process yields strong uniform beads for minimal dusting and consistent pressure drop.



#### Application

OXYSIV MDX adsorbent is recommended for use in light weight and/or portable medical oxygen concentrators for generation of high purity (90-95%) oxygen. Optimal bed size reduction is achieved by using a vacuum swing cycle. OXYSIV MDX molecular sieve has high nitrogen capacity and superior nitrogen/oxygen selectivity that results in the use of significantly less material relative to other molecular sieve adsorbents, without sacrificing oxygen throughput or purity.

#### Typical physical properties

	30x60 Beads	20x50 Beads
Nominal particle diameter (mm)	0.4	0.6
Density (lb/ft <sup>3</sup> ) (kg/m <sup>3</sup> )	38	38.5
Water content, as shipped (wt-%)	0.5	0.5

#### Safety and handling

OXYSIV MDX adsorbent will preferentially adsorb water over all other airborne molecules. To ensure maximum nitrogen capacity, moisture pick-up from air exposure should be minimized. Adsorbed water cannot be readily removed via pressure or vacuum swing purging. For more information, see the UOP brochure "Molecular Sieves Safety Bulletin for Manufactures."

#### Shipping information

UOP OXYSIV MDX adsorbent is shipped in 55-gallon steel drums.

#### For more information

For more information, contact your local UOP representative or our Des Plaines sales office:

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