

## DATASHEET

No. 1204

Jun 2006

### DARCO® 12X40

#### GRANULAR ACTIVATED CARBON

**DARCO 12X40** is an acid washed granular activated carbon produced by steam activation of lignite coal. This grade is specifically manufactured for applications requiring rapid adsorption rate in percolation columns.

**DARCO 12X40** is a general purpose granular carbon grade used in a variety of applications including purification of fine chemicals and food.

**DARCO 12X40** is frequently used for water purification because of its high dechlorination efficiency and excellent adsorption capacity for tastes, odors and colors. **DARCO 12X40** is Kosher certified and meets ANSI/NSF Standard 61.

#### Product Specifications

Molasses decolorizing efficiency	90 min.
Moisture, % as packed	12 max.
Mesh size (U.S. Sieve Series)	
Greater than 12 mesh (1.70 mm), %	10 max.
Less than 40 mesh (0.42 mm), %	5 max.
Dust, %	0.40 max.

#### Typical Properties\*

Tannin value, mg/L	140
Iodine number, mg/g	625
pH, water extract	4.6
Apparent density, vibrating feed, g/mL	0.40
lb/ft <sup>3</sup>	25
Bed density, backwashed and drained, lb/ft <sup>3</sup>	22.5
Surface area, m <sup>2</sup> /g	650
Total pore volume, mL/g	0.95
Effective size, mm	0.65
Mean particle diameter, mm	1.0
Uniformity coefficient	1.5
Food Chemical Codex	Passes

\*For general information only, not to be used as purchase specifications.

#### Packaging/Transportation

Standard package is 40 lb bags, 30 bags per pallet for a net pallet weight of 1200 lbs. Alternate packages include woven polypropylene bulk bags, 880 lbs net, with a glued plastic liner.

Activated carbon (NOT REGULATED)

Exempt from DOT, IATA, and IMDG regulations

Import/Export classification: 3802.10.0000 (HS Tariff Classification)

Domestic Freight Classification: NMFC 040560

CAS # 7440-44-0

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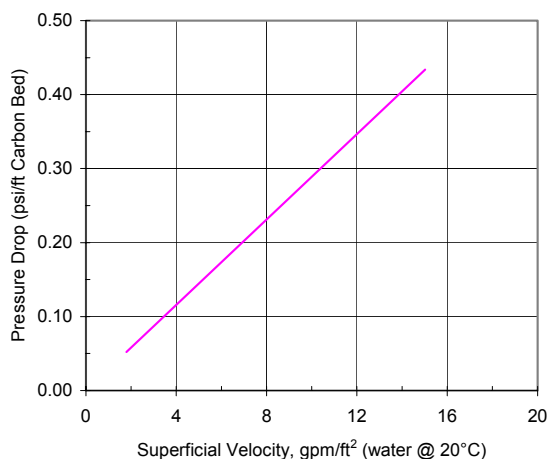
## DARCO® 12X40 (continued)

### Material Handling

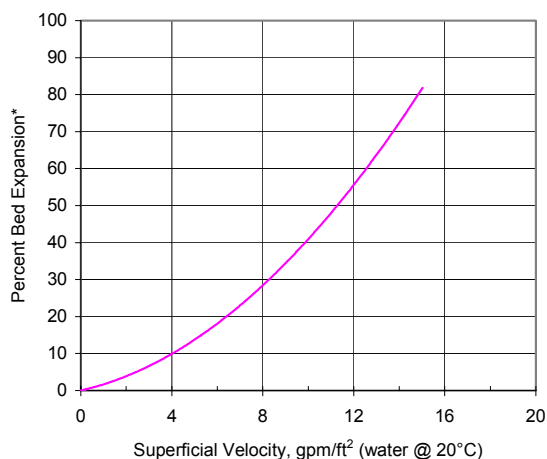
Wet activated carbon depletes oxygen from air and, therefore, dangerously low levels of oxygen may be encountered. Whenever workers enter a vessel containing activated carbon, the vessel's oxygen content should be determined and work procedures for potentially low oxygen areas should be followed. Appropriate protective equipment should be worn. Avoid inhalation of excessive carbon dust. No problems are known to be associated in handling this material. This product contains silica. Please see the product Material Safety Data Sheet for details. Long-term inhalation of high dust concentrations can lead to respiratory impairment. Use forced ventilation or a dust mask when necessary for protection against airborne dust exposure (see Code of Federal Regulations - Title 29, Subpart Z, par. 1910.1000, Table Z-3).

### Engineering Data

**Pressure Drop Curve  
for DARCO 12X40**



**Bed Expansion Curve  
for DARCO 12X40**



\*Expansion is expressed as percent of  
the backwashed and settled bed depth.

Note: Any specification given was valid at time of issuance of the publication. However, we maintain a policy of continuous development and reserve the right to amend any specification without notice.

