

Product Data Sheet

Sorbead® Air R

Sorbead® Air R is an alumino-silicate gel in our line of highly efficient adsorbents ideally suited for compressed air drying.

Product description

Sorbead® Air R is a high-performance adsorbent designed for applications in compressed air industry. It is available as hard, spherical beads. These beads are adsorbents for water, and resist crushing and attrition. The product has an above average drying capacity, low required desorption temperature, long life span, and high mechanical strength. When used to dry compressed air, these properties effectively reduce operating costs in manufacturing plants.

Applications

Sorbead® Air R is used for drying of compressed air. The standard Sorbead® Air R is a highly active, universally applicable adsorbent in the regenerated state but is sensitive to water droplets. Therefore, it is best to use a guard layer of 15-20% of Sorbead® Air WS that protects the main bed against liquid water condensate.

Safety & handling

Sorbead® Air R is classified as nontoxic and does not produce toxic effects upon reasonable exposure. It is also known to have high thermal stability and hydrothermal stability. Normal housekeeping and operating procedures should ensure personnel safety. The data contained herein are for general informational

purpose only. Please refer to the Safety Data Sheet for specific, complete information regarding these products.

Physical Properties	
Chemical Composition	97 % SiO ₂ , 3 % Al ₂ O ₃
Surface Area, m²/g	700-750
Pore volume, ml/g	0.41-0.43
Bulk Density, kg/L	0.8
Equilibrium capacity for water vapor at 25 °C and relative humidity 80%	38.0-40.0
Crush Strength, N	180-200
Attrition, wt %	0.05-0.1
Grain size (mm)	2-5
Water (liquid) resistant	No
Moisture resistant	Yes
Typical desorption temperature (°C)	120-150
Pressure dew point of surrounding air can get down to (°C)	-60

Typical distribution of grain size

- 2.0-5.0 mm
- Other sizes on request

Packaging

- Big bag, 1875 lb, 850 kg
- Steel drums, 330 lb, 150 kg

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