

T-99.5 PROX-SVERS® INERT CATALYST SUPPORT BALLS

T-99.5 PROX-SVERS® catalyst bed support balls, composed of sintered α -alumina with very low impurity levels, are essentially inert in most chemical environments.

The low silica content make T-99.5 balls an excellent choice for high temperature applications in the presence of reducing atmospheres, where silica leaching must be held minimal, such as in reformers for synthesis gas production.

The low level of other impurities make T-99.5 balls an excellent recommendation for supporting adsorbents used to purify reactive monomers such as ethylene and propylene.

TYPICAL CHEMICAL ANALYSIS (wt.%)	
Alumina, Al ₂ O ₃	≥ 99.5
Silica, SiO ₂	< 0.15
Iron, Fe ₂ O ₃	< 0.10
Soda, Na ₂ O	< 0.20
TYPICAL PHYSICAL PROPERTIES	
Shape	Spherical
Avg Crush Strength, lbs (kg) 1/16" (1.0 – 2.0 mm)	120 (55)
1/8" (3.2 mm)	400 (181)
1/4" (6.4 mm)	600 (272)
5/16" (7.9 mm)	700 (317)
1/2" (12.7 mm)	2300 (1043)
5/8" (15.9 mm)	>3000 (1360)
3/4" (19.0 mm)	>3000 (1360)
1" (25.4 mm)	>5000 (2268)
1.5" (38.1 mm)	>5000 (2268)
2" (50.8 mm)	>5000 (2268)
3" (75 mm)	>5000 (2268)
4" (100 mm)	>5000 (2268)
Loose Fill Packing Density, lbs/ft ³ (kg/m ³)	≤ 1-1/4" 125 – 135 (2003 - 2163)
	≥ 1-1/2" 115 - 125 (1842 - 2003)
Apparent Particle Density, lbs/ft ³ (g/cc)	225 (3.6)
Water Absorption, Wt%	< 1"
	< 1
Hardness, Mohs'	9
Maximum Use Temperature, °F (°C)	3272 (1800)
Heat Capacity @ 700°C	0.3 cal/gm/°C
Specific Gravity	3.75
Apparent Porosity (%)	3%
Surface Area	<0.7 m ² /g
UOP Thermal Shock Resistance	Passed
UOP Pressure Shock Resistance	Passed

The above data are based on controlled testing. Individual test results may vary, therefore these data may not be used for specification purposes. Average crush strength values are actual force required by a hydraulic press to break individual spheres. **NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, ARE MADE REGARDING THE DATA OR PRODUCTS SHOWN ABOVE.**