

## T-99 PROX-SVERS<sup>®</sup> INERT CATALYST SUPPORT BALLS

T-99 PROX-SVERS<sup>®</sup> catalyst bed support balls, composed of sintered  $\alpha$ -alumina with very low impurity levels, are essentially inert in most chemical environments.

The low silica content make T-99 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 balls an excellent recommendation for supporting adsorbents used to purify reactive monomers such as ethylene and propylene.

TYPICAL CHEMICAL ANALYSIS (wt.%)		
Alumina, Al <sub>2</sub> O <sub>3</sub>	99.5	
Silica, SiO <sub>2</sub>	0.02	
Iron, Fe <sub>2</sub> O <sub>3</sub>	0.02	
Soda, Na <sub>2</sub> 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)	
3/4" (19.0 mm)	>3000 (1360)	
1" (25.4 mm)	>5000 (2268)	
2" (50.8 mm)	>5000 (2268)	
<b>NEW!</b> 3" (75 mm)	>5000 (2268)	
<b>VERY NEW!</b> 4" (100 mm)	>5000 (2268)	
Loose Fill Packing Density, lbs/ft <sup>3</sup> (kg/m <sup>3</sup> )	≤ 1-1/4" 125 – 135 (2003 - 2163)	≥ 1-1/2" 115 - 125 (1842 -
	Apparent Particle Density, lbs/ft <sup>3</sup> (g/cc)	
225 (3.6)		
Apparent Porosity, Wt%	≤ 1-1/4" < 1	≥ 1-1/2" < 5
	Maximum Use Temperature, °F (°C)	
3272 (1800)		
UOP Attrition Loss, Wt%		
< 0.5		
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.  
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Revised: December 17, 2009