Stabilized Zirconia

Product Code	Chemical Formula	Analytical Value Typical Specifications										
		ZrO_2+HfO_2 (Min%)	Y_2O_3 (Max%)	Al_2O_3 (Max%)	SiO_2 (Max%)	Fe_2O_3 (Max%)	TiO_2 (Max%)	Na_2O (Max%)	Average Particle Size D_{50} (μm)	B.E.T (m^2/g)	Ig.Loss (Max%)	Form & Appearance
OZ-3YG-4	$(Y_2O_3)x(ZrO_2)1-x$	94.0	5.40±0.25	0.229	0.008	0.001	0.001	0.005	1.000	8.200	2.35	White Powder
OZ-3Y-6	$(Y_2O_3)x(ZrO_2)1-x$	94.0	5.30±0.25	0.231	0.013	0.002	0.001	0.005	0.5-1.0	11-15	0.96	White Powder
OZ-3YG-6	$(Y_2O_3)x(ZrO_2)1-x$	94.0	5.35±0.25	0.235	0.007	0.001	0.001	0.005	1.000	1	2.73	White Powder
OZ-3Y-7	$(Y_2O_3)x(ZrO_2)1-x$	94.0	5.25±0.25	0.231	0.001	0.001	0.001	0.005	0.5-1.0	6-9	0.83	White Powder
OZ-3YAZr-7	$(Y_2O_3)x(ZrO_2)1-x$	94.0	5.30±0.25	0.233	0.001	0.001	0.001	0.005	0.5-1.0	6-9	0.38	White Powder
OZ-4Y	$(Y_2O_3)x(ZrO_2)1-x$	92.0	7.2±0.25	——	0.020	0.003	0.002	0.005	<1.0	6-9	1.0	White Powder
OZ-8Y	$(Y_2O_3)x(ZrO_2)1-x$	86.0	13.5±0.25	——	0.020	0.003	0.002	0.005	1.0	——	1.0	White Powder

3Y : It means 3 mol% Y_2O_3 ‖ G : It means powder with binder.

3YG-4 : Apply in big special-shaped structure parts ‖ 3YG-6 : Apply in small special-shaped structure parts

3Y-7 / 3YAZr-7 : Apply in small casting and injection mould parts

Application : Advanced Ceramic, Structural Ceramic Parts, Grinding Ball and Solid Fuel Cell.

Transformation of Zirconium Oxide

This transformation can be stabilized by doping with Y_2O_3, CaO, MgO etc.,for the stabilization of the crystalized isometric and tetragonal structure.