

## **Chem-Metals & Rare Earth**

## Yttria-stabilized Zirconia

Yttria-stabilized Zirconia (YSZ), a kind of raw material for ceramic. The ZrO<sub>2</sub> is monoclinic crystal at indoor tempreture, because of the addition of Y2O3, it becomes more stabilized tetragonal crystal and cubic crystal with the tempreture increasing. The excellent crystalline grain with lower rate of pores obtain perfect mechanical strength, corrosivity,





toughness and density. It is mainly used as wear parts, cutting tools, thermal coating material, refractory ceramic parts and furnace tube etc.

No.	Item		Standard Specification			
1	Chemical Composition	ZrO <sub>2</sub>	86%(or as required)			
		$Y_2O_3$	14%(or as required)			
		Impurity Max each	Fe <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	CaO	HfO <sub>2</sub>
			0.05%	0.05%	0.05%	0.5%
2	Physical Property	Density	4.5g/cm <sup>3</sup>			
		Heat-resistance	2300°C			
3	Form		Powder or as required size			
4	Packing		10-20kgs in suffocating free wooden box			

## **■** Fluorinated Ketone

Fluorinate Ketone, or Perfluoro (2-methyl-3-pentanone), C<sub>6</sub>F<sub>12</sub>O, colorless, transparent and insulating liquid, is easy to gasify. It is a environmentally friendly fire extinguishing agent

with 0 ODP and 1 GWP, so it's a perfect substitute of Halon, HFC and PFC. It is mainly used as fire extinguishing agent, evaporator clearning agent to remove the sediments and impurities and solvent to dissolve perfluoropolyether compounds etc.





No.		Item	Standard Specification			
1	Composition	C <sub>6</sub> F <sub>12</sub> O	99.9%			
		Acidity	3.0	ppm		
		Moisture	0.001%			
		Residue on evaporation	0.01%	·		
2	Physic chemical Parameters	Freezing Point	-108	°C		
		Critical Temperature	168.7	°C		
		Critical Pressure	18.65	bar		
		Critical Density	0.64	g/cm <sup>3</sup>		
		Vaporization Heat	88	KJ/kg		
		Specific Heat	1.013	KJ/kg		
		Viscosity Coefficient	0.524	ср		
		Density	1.6	g/cm <sup>3</sup>		
		Vapor Pressure	0.404	bar		
		Dielectric Strength	110	kv		
3	Packing	250kgs in iron drum or 500kgs in steel drum				

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