

# Zirconium (Zr) Compounds

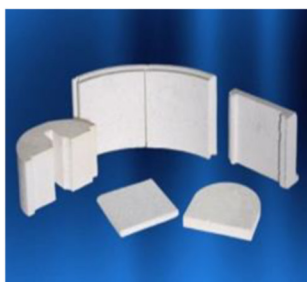
Iwatani has worked with numerous customers over the years as an exclusive Japanese distributor for Jiangxi Kingan Hi-Tech Co., Ltd., one of the world's largest producers of zirconium compounds.

We offer optimal solutions to meet customer needs in terms of price, quality, stable supply, and more.

## ① Zirconium (Zr) compounds

Product	Chemical formula	Typical specifications						
		Zr(Hf)O <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	Na <sub>2</sub> O	SiO <sub>2</sub>	Cl	PH
Zirconium oxychloride	ZrOCl <sub>2</sub>	≥ 35.5	≤ 0.0002	≤ 0.0010	≤ 0.0060	≤ 0.0070		
Zirconium carbonate	ZrO(CO <sub>3</sub> )	40-42	≤ 0.0010	≤ 0.0010	≤ 0.0100	≤ 0.0100	≤ 0.0200	
Ammonium zirconium carbonate	(NH <sub>4</sub> ) <sub>2</sub> ZrO(CO <sub>3</sub> ) <sub>2</sub>	15-22	≤ 0.0020		≤ 0.0010	≤ 0.0010		9-10
Zirconium sulfate	ZrOSO <sub>4</sub>	35-40	≤ 0.0010	≤ 0.0010	≤ 0.0010	≤ 0.0020	≤ 0.0500	
Zirconium nitrate	ZrO(NO <sub>3</sub> ) <sub>2</sub>	≥ 33	≤ 0.0030		≤ 0.0050	≤ 0.0100		3-4
Zirconium acetate	ZrO(CH <sub>3</sub> COO) <sub>2</sub>	20-22	≤ 0.0030		≤ 0.0500	≤ 0.0100	≤ 0.0100	
Zirconium hydroxide	ZrO(OH) <sub>2</sub>	≥ 38	≤ 0.0050	≤ 0.0010	≤ 0.0500	≤ 0.0200		
Zirconium oxide (zirconia)	ZrO <sub>2</sub>	≥ 99.95	≤ 0.0005	≤ 0.0010	≤ 0.0010	≤ 0.0030	≤ 0.0200	

Major applications: Raw materials for zirconia (ZrO<sub>2</sub>), exhaust gas purification catalysts, metal soaps (cross-linking agents), corrosion inhibitors, ion-exchange resins



Photographs: Examples of final products (from left to right: zirconia ceramics, disk, crushing balls, ceramic knife)

## ② Zirconium oxide (ZrO<sub>2</sub>)

Grade	Zr(Hf)O <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	TiO <sub>2</sub>	Na <sub>2</sub> O	Cl
AJ	≥ 99.95	≤ 0.0005	≤ 0.0030	≤ 0.0010	≤ 0.0010	≤ 0.0200
AC	≥ 99.90	≤ 0.0005	≤ 0.0030	≤ 0.0010	≤ 0.0015	≤ 0.0200
BJ	≥ 99.80	≤ 0.0030	≤ 0.0100	≤ 0.0030	≤ 0.0050	≤ 0.0200
CJ	≥ 99.50	≤ 0.0050	≤ 0.0100	≤ 0.0050	≤ 0.0100	≤ 0.0500
DJ	≥ 99.50	≤ 0.0050	≤ 0.0300	≤ 0.0050	≤ 0.0200	≤ 0.0800

Physical properties: ① D50 = 0.3 to 50 μm ② Specific surface area: 3 to 150 m<sup>2</sup>/g

Major applications: Electronic materials, optical glass, raw material for zirconium compounds

- ◆ Specific elements can be reduced and characteristics (particle size, specific surface area) can be controlled to suit requirements.
- ◆ Do not hesitate to inquire about compounds not listed in this catalog.