

JINTAI Catalyst Support Media



[JINTAI Group](#) has developed two types of catalyst support spheres:

- JINTAI Inert Ceramic Ball: JT-ICB
- JINTAI Inert Alumina Ball: JT-IAB

JINTAI Inert Ceramic Ball (Product No: JT-ICB)

Brief introduction

JINTAI Inert Ceramic Ball is specially designed for the best performance under the most demanding conditions. JINTAI Ceramic Inert Balls are widely used in many different applications. The main components of the raw material of the JT-ICB are $\text{SiO}_2 < 80\%$, $\text{Al}_2\text{O}_3 + \text{SiO}_2 > 93\%$. The predominant qualities of the JT-ICB catalyst bed support media are its low pressure drop, excellent compressive strength and good resistance to thermal shock.

JINTAI Inert Ceramic Ball ($\text{Al}_2\text{O}_3 + \text{SiO}_2 > 93\%$)

Applications:

- | | |
|-------------------------|-----------------------|
| ● Catalytic conversion, | ● Hydro-dealkylation, |
| ● Catalytic cracking, | ● Hydrogenation, |
| ● Catalytic reforming, | ● Hydro-treating, |
| ● Condensation, | ● Isomerisation, |
| ● Dehydrogenation, | ● Air drying, |
| ● Desulphurisation, | ● Sulphur recovery, |
| ● Hydro-cracking, | ● Thermal cracking. |



Physical Properties

Water absorption	<1%
Specific gravity(g/cm ³)	2.3-2.4
Packing density (kg/m ³)	1350~1400
Operation temp.(max)	1100°C
Moh's hardness	>6.5 scale
Acid resistance	>99.8%

TYPICAL CHEMICAL ANALYSIS (wt. %)

SiO_2	<80%
$\text{Al}_2\text{O}_3 + \text{SiO}_2$	>93%
CaO	0.5%
TiO_2	0.5%
$\text{K}_2\text{O} + \text{Na}_2\text{O}$	4.0%
MgO	0.5%
Fe_2O_3	1.0%



JINTAI Inert Alumina Ball (Product No: JT-IAB)

Brief introduction

JINTAI Inert Alumina ball spheres are characterized by their low silica content ($\text{SiO}_2 < 0.2\%$). The high degree of purity ($\text{Al}_2\text{O}_3 > 99\%$) and strength make the product ideal for high temperature and steam applications where leached silica can coat downstream equipment or foul or poison the catalyst bed. The excellent thermal properties combined with its high density and ability to withstand operating temperatures to 1.800°C , make it a good choice for heat retention or equilibration media. All produced batches are tested according to the standard quality tests and a test certificate can be supplied together with the delivery. Additional testing is available on request.

Advantage

- Monolith structure eliminates in-service spalling and delamination, which prevents the incidence of fine chips and splinters plugging beds of catalyst.
- Maximum resistance to erosion and low attrition minimizes the possibility of catalyst contamination
- High thermal shock resistance

JINTAI Inert Alumina Ball($\text{Al}_2\text{O}_3 > 99\%$)

Applications:

- | | |
|---------------------|--------------------------|
| ● Ethylene Cracking | ● Desulfurizers |
| ● Ethylene Drying | ● Secondary Reformers |
| ● Methanator | ● Low Temperature Shift |
| ● Polymerization | ● High Temperature Shift |



Physical Properties

Water absorption	<5%
Specific gravity(g/cm ³)	3.4-3.8
Packing density (kg/m ³)	2000~2200
Operation temp.(max)	1600~1800°C
Moh's hardness	>8.0 scale
Acid resistance	>99.8%

TYPICAL CHEMICAL ANALYSIS (wt. %)

SiO ₂	<0.2%
Al ₂ O ₃	>99%
CaO	0.1%
TiO ₂	0.02%
K ₂ O	0.2%
Na ₂ O	0.3%
MgO	0.1%
Fe ₂ O ₃	0.12%

