



## SHANGHAI JIUZHOU CHEMICALS CO., LTD

Office: Rm1111, No. 11, Yujinggang Road, Jing'an District, Shanghai, China

Factory: No. 4598, Jinshan Avenue, Jinshan District, Shanghai, China

Tel: +86 21 6876 9026

Fax: +86 21 6876 9036

Email: [marketing@jiuzhouchemicals.com](mailto:marketing@jiuzhouchemicals.com)

Website: <http://www.jiuzhouchemicals.com>



SHANGHAI JIUZHOU CHEMICALS CO., LTD



[www.jiuzhouchemicals.com](http://www.jiuzhouchemicals.com)



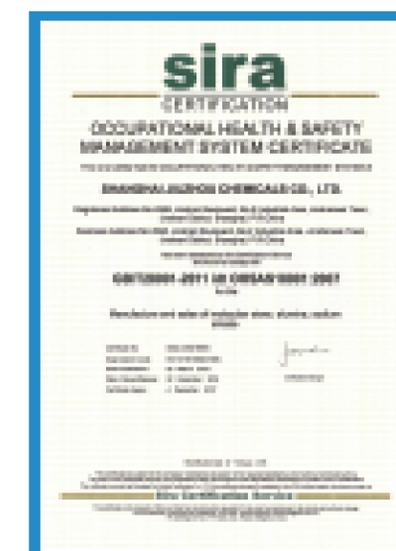
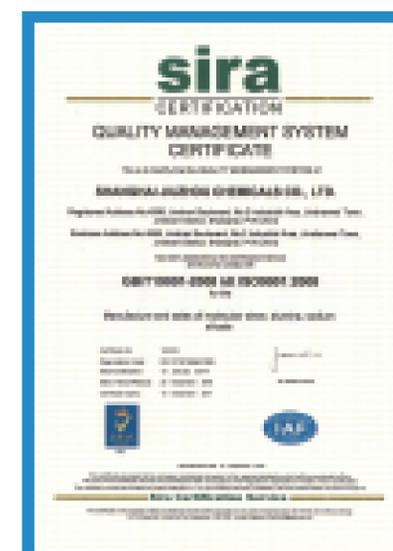
## SHANGHAI **J I U Z H O U**

Shanghai Jiuzhou Chemicals Co. Ltd was established in 2005. Over the years Jiuzhou has always adhered to the “quality control, innovation” principles, committed to the development, research, manufacturing of high quality innovative chemical products. Our main products includes various molecular sieve powders, molecular sieves, activated powder, activated alumina, ceramic balls, sodium silicates, silica gel, zeolite 4A, soda ash, etc. Our products passed the ISO 9001, ISO 14001 and ISO 18001 Certificates. And we have obtained TUV certificate for main product in 2016.

Jiuzhou's factory is based in Shanghai Jinshan Development Zone. With an area of 21,000m<sup>2</sup> and contain advanced quality control instruments. Jiuzhou is one of the largest and highest capacity factory in producing the silicon, aluminum and aluminosilicate in domestic private investment enterprise. Our Molecular sieve production capacity can reach 8000 tons per year and activated alumina with 18,000 tons per year. Jiuzhou has a professional and world-class research team and experts in chemical product resources.

Jiuzhou's products sell in domestic and foreign markets. We continue to expand our international business in the world. Until now Jiuzhou has established long term business relationships with the United States, South America, Europe, Asia, Southeast Asia, and the Middle East etc. Jiuzhou's products have obtained highly foreign recognition and the business continues to grow. Our main customers include Petro China, BASF, Air Product, Clariant and so on.

## ISO Certificates



## **Petrol Chemicals**

Purification and dehydration of cracking gas and natural gas.



## **Coating, Polyurethane**

Decrease water content, eliminate bubbles, improve stability and strength of coating and PU system.



# APPLICATION

## **Air Drying**

Used in air dryer and insulating glass as desiccant.



## **Air Separation**

Used in PSA system for Nitrogen; Oxygen; Hydrogen.



# PRODUCT CATALOG

## 01 Zeolite Molecular Sieve

- Zeolite Powder
- Activated Zeolite Powder
- 3A Molecular Sieve
- 4A Molecular Sieve
- 5A Molecular Sieve
- 13X APG Molecular Sieve
- Industrial Oxygen Molecular Sieve
- Portable Medical Oxygen Molecular Sieve
- Carbon Molecular Sieve
- XH Series Molecular Sieve
- Insulating Glass Molecular Sieve

## 02 Alumina

- Activated Alumina JZ-K1
- Activated Alumina JZ-K2
- Ceramic Alumina Ball
- Activated Alumina Carry Potassium Permanganate

## 03 Silica Gel

- Silica Gel
- Silica Alumina Gel
- Blue / Orange Silica Gel

## 04 Detergent

- Zeolite 4A
- Soda Ash

### Zeolite Powder

**Application:** The powder of molecular sieve could be formed into different molecular sieve with various specifications and shapes. After calcinations, it could be widely used in petrochemical, fine chemical, air-separating and insulating glass industries, etc, and showing different adsorptive and catalytic performances.

#### Specification:

Item	Unit	3A (K)	4A (Na)	5A (Ca)	13X (NaX)
Static Water Adsorption	≥wt%	25.5	27.5	28	32
Bulk Density	≥g/ml	0.65	0.65	0.65	0.68
CO <sub>2</sub> Adsorption	≥wt%	/	/	/	22.5
Exchange Rate	≥%	40	/	70	/
PH	≥	9	9	9	9
Package Moisture	≤wt%	22	22	22	24

### Activated Zeolite Powder

**Description:** Activated Zeolite powder is formed after deep processing of synthetic zeolite powder. It has certain dispersion and fast adsorption capacity; It will improve stability and strength of material; Avoid bubble and increase shelf-life.

- Application:** 3A is used commercial for insulating glass sealant strips and solvents.  
 4A is used commercial for dehydration of coating and polyurethane glue etc.  
 5A is used commercial for dehydration of coating and solvents.  
 13X is used commercial for dehydration in coating industry and paint industry, it can also absorb CO<sub>2</sub>.

#### Specification:

Item	Unit	3A Type	4A Type	5A Type	13X Type
Particle Size	μm	2-6	2-6	2-6	2-6
Static Water Adsorption	≥wt%	23	24	25	28
Package Moisture	≤wt%	2	2	2	2
PH	≥	9	9	9	9
Bulk Density	≥g/ml	0.50	0.50	0.50	0.50

### 3A Molecular Sieve

**Description:** A kind of alkali-metallic, silicon-aluminum compounds, It could absorb the molecules which critical diameter is not more than 3 angstroms.

**Application:** It is widely used in deep desiccation of cracked petroleum gases, such as ethylene, propylene, butadiene, acetylene and natural gas, and of polar liquid, such as ethanol, LPG and solvent.

**Specification:**

Item	Unit	Bead		Pellet	
		1.6-2.5	3-5	1/16'	1/8'
Diameter	mm	1.6-2.5	3-5	1/16'	1/8'
Static Water Adsorption	≥ wt%	21	21	20.5	20.5
Bulk Density	≥ g/ml	0.70	0.68	0.68	0.66
Crushing Strength	≥ N/Pc	25	80	30	70
Attrition Rate	≤ wt%	0.1	0.1	0.4	0.4
Package Moisture	≤ wt%	1.5	1.5	1.5	1.5

### 4A Molecular Sieve

**Description:** A kind of alkali-metallic, silicon-aluminum compounds, It could absorb the molecules which critical diameter is not more than 4 angstroms.

**Application:** It is mainly used for desiccation of gases and liquids ,such as associated gas in oil field and natural gas, adsorb H<sub>2</sub>O, H<sub>2</sub>S, NH<sub>3</sub>, SO<sub>2</sub>, CO<sub>2</sub>,C<sub>2</sub>H<sub>5</sub>OH,C<sub>2</sub>H<sub>6</sub> and so on.

**Specification:**

Item	Unit	Bead		Pellet	
		1.6-2.5	3-5	1/16'	1/8'
Diameter	mm	1.6-2.5	3-5	1/16'	1/8'
Static Water Adsorption	≥ wt%	22	22	21.5	21.5
Bulk Density	≥ g/ml	0.68	0.68	0.68	0.66
Crushing Strength	≥ N/Pc	35	80	30	80
Attrition Rate	≤ wt%	0.1	0.1	0.4	0.4
Package Moisture	≤ wt%	1.5	1.5	1.5	1.5

### 5A Molecular Sieve

**Description:** A kind of alkali-metallic, silicon-aluminum compounds, It could absorb the molecules which critical diameter is not more than 5 angstroms.

**Application:** Used for the dehydration and purification of various hydrocarbon and non-hydrocarbon gas and liquid streams. It is used for the separation of straight and branched chain hydrocarbons, sweetening and drying of natural gases and the production of high purity hydrogen.

**Specification:**

Item	Unit	Bead		Pellet	
		1.6-2.5	3-5	1/16'	1/8'
Diameter	mm	1.6-2.5	3-5	1/16'	1/8'
Static Water Adsorption	≥ wt%	21.5	21.5	22	22
Bulk Density	≥ g/ml	0.68	0.68	0.68	0.66
Crushing Strength	≥ N/Pc	30	80	35	70
Attrition Rate	≤ wt%	0.1	0.1	0.3	0.3
Package Moisture	≤ wt%	1.5	1.5	1.5	1.5

### 13X APG Molecular Sieve

**Description:** A kind of alkali-metallic, silicon-aluminum compounds, it could absorb the molecules which critical diameter is not more than 9 angstroms.Any molecules which can be absorbed on Molecular Sieve types 3A, 4A,and 5A can be adsorbed on type 13X.

**Application:** Used for general air-drying, decontaminating of raw material in air-separating equipments (to adsorb water and carbon dioxide),and desulfuration of liquid hydrocarbons and natural gases(to take off hydrogen sulfide and mercaptan).

**Specification:**

Item	Unit	Bead			Pellet	
		0.5-0.8	1.6-2.5	3-5	1/16'	1/8'
Diameter	mm	0.5-0.8	1.6-2.5	3-5	1/16'	1/8'
Static Water Adsorption	≥ wt%	27	26.5	26.5	26	26
CO <sub>2</sub> Adsorption	≥ wt%	18	18	18	17.5	17.5
Bulk Density	≥ g/ml	0.62	0.64	0.64	0.62	0.62
Crushing Strength	≥ N/Pc	/	25	80	25	65
Attrition Rate	≤ wt %	/	0.1	0.1	0.4	0.4
Package Moisture	≤ wt %	1.5	1.5	1.5	2.0	2.0

### Industrial Oxygen Molecular Sieve

**Description:** Molecular sieve beads are designed for industrial or medical oxygen concentrators in PSA system. Industrial oxygen molecular sieve has good selectivity of N<sub>2</sub>/O<sub>2</sub>, excellent crush strength, loss on attrition and little dust.

**Application:** Industrial oxygen generator / Medical oxygen generator.

#### Specification:

Item	Unit	5A	13X HP	Lithium
Diameter	mm	1.6-2.5	1.6-2.5	1.6-2.5
Static Water Adsorption	≥wt%	25.5	29	/
CO <sub>2</sub> Adsorption	≥wt%	18	19	/
N <sub>2</sub> Adsorption	≥ml/g	10	10.8	22
Separation Value of N <sub>2</sub> & O <sub>2</sub>	≥	3.2	3.2	6
Bulk Density	≥g/ml	0.7	0.62	0.62
Crushing Strength	≥N/Pc	25	25	25
Attrition Rate	≤wt%	0.3	0.3	1
Package Moisture	≤wt%	1.5	1	0.5

### Portable Medical Oxygen Molecular Sieve

**Description:** Smaller Molecular sieve beads is designed for small medical oxygen concentrator. Specially designed for oxygen generators using PSA process. Portable medical oxygen molecular sieve has good selectivity of N<sub>2</sub>/O<sub>2</sub>, excellent crush strength, loss on attrition and little dust.

**Application:** Portable Oxygen Medical oxygen generator.

#### Specification:

Item	Unit	5A	13X HP	Lithium
Diameter	mm	0.5-0.8	0.5-0.8	0.5-0.8
Static Water Adsorption	≥wt%	25.5	30	/
CO <sub>2</sub> Adsorption	≥wt%	18	19.5	/
N <sub>2</sub> Adsorption	≥ml/g	10	10.8	22
Separation Value of N <sub>2</sub> & O <sub>2</sub>	≥	3.2	3.2	6
Bulk Density	≥g/ml	0.7	0.62	0.62
Crushing Strength	≥N/Pc	/	/	/
Attrition Rate	≤wt%	/	/	1
Package Moisture	≤wt%	1.5	1	0.5

### Carbon Molecular Sieve

**Description:** CMS takes the appearance of cylindrical black solid, contains countless 3 angstrom fine pores.

**Application:** CMS used to separate air into nitrogen and oxygen. In industry, CMS can concentrate nitrogen from air with PSA systems. The carbon molecular sieve is widely applied in petroleum chemical industry, the heat treatment of metal, the electronic manufacture and food preservation industries.

#### Specification:

Diameter	1.1-1.2mm			
Bulk Density	680-700g/l			
Adsorption Rate	2*60s			
Crush Strength	≥60N/Pc			
Type	Adsorbent pressure (Mpa)	N <sub>2</sub> purity %	N <sub>2</sub> Capacity (NM <sup>3</sup> /h.t)	Air/N <sub>2</sub>
CMS-200	0.75-0.8	95	360	1.75
		97	320	2.0
		98	240	2.3
		98.5	235	2.34
		99	225	2.41
		99.5	200	2.6
CMS-220	0.75-0.8	95	380	1.75
		97	340	2.0
		98	260	2.25
		98.5	255	2.29
		99	245	2.38
		99.5	220	2.55
CMS-240	0.75-0.8	98.5	275	2.25
		99	260	2.35
		99.5	240	2.5
		99.9	155	3.5
		99.99	110	4.65
		99.999	65	6.7
CMS-260	0.75-0.8	99	320	2.2
		99.5	260	2.5
		99.9	175	3.5
		99.99	120	4.6
		99.999	70	6.7

### XH Series Molecular Sieve

**Description:** Used for dehydration and drying of refrigerants

**Application:** XH-5 used commercially for dehydration and drying of refrigerants R12, R22.

XH-7 used for dehydration and drying of new refrigerants R-134a in household and commercial refrigerator, iceboxes and air conditioners. It is also used for specialized refrigerants such as butane in "green" refrigerators.

XH-9 used commercially in drying refrigerants in air conditioners, iceboxes and refrigerators in cars, station wagons, refrigerating trucks, trains and shipper.

XH-11 available in bead for dehydration and drying of refrigerants R407c, R-410a

**Specification:**

Item	Unit	XH-5	XH-7	XH-9	XH-11
Diameter	mm	1.6-2.5	1.6-2.5	1.6-2.5	1.6-2.5
Static Water Adsorption	≥ wt%	21	17.5	17	16.5
Dynamic Water Adsorption	≥ wt%	6	6	6	6
Bulk Density	≥ g/ml	0.80	0.85	0.85	0.85
Crushing Strength	≥ N/Pc	80	75	80	70
Wear Rate (Dry)	≤ wt%	0.1	0.1	0.1	0.1
Wear Rate (Wet)	≤ wt%	3.0	3.0	3.0	3.0
Package Moisture	≤ wt%	1.5	1.5	1.5	1.5

### Insulating Glass Molecular Sieve

**Description:** It is a synthetic zeolite of A-type crystal structure in potassium-sodium form

**Application:** Used to adsorb continuously an amount of moisture from the interspaces, maintains the proper dew point of the space between the inner and outer panes of insulating glass, minimize pressure changes which can eventually leads to distortion of insulating glass or even broken. The product can extend the lifetime of insulating glass unit with low dust, low attrition and low gas desorption to resulting in enhancing the quality, performance, and reliability of insulating glass.

**Specification:**

Item	Unit	Bead						
		0.5-0.8	0.5-1.0	0.8-1.2	1.0-1.5	1.2-1.8	1.5-2.0	1.6-2.5
Diameter	mm							
Static Water Adsorption	≥ wt%	20	20	20	20	20	20	20
Bulk Density	≥ g/ml	0.75	0.75	0.74	0.70	0.70	0.70	0.70
Crushing Strength	≥ N/Pc	/	/	/	10	14	18	22
Δt(25g-25cc)	≥ °C	38	38	38	38	38	38	38
Particle	≥ %	85	90	90	94	94	94	96
Package Moisture	≤ wt%	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Attrition Rate	≤ mg/ m <sup>3</sup>	20	20	20	20	20	20	20

### Activated Alumina JZ-K1

**Description:** It is made of aluminium oxide (alumina; Al<sub>2</sub>O<sub>3</sub>).

**Application:** Widely used for drying in electronic, textile and oxidizing industry, also as adsorbent in air-grading industry(dew-point below -55). It's especially suitable for atmospheric temperature recovering equipment. also used as a de-fluorinating agent of drinking water.

**Specification:**

Item	Unit	Bead						
		0.4-1.2	2.0-3.0	3.0-4.0	3.0-5.0	4.0-6.0	5.0-7.0	6.0-8.0
Particle Size	mm							
Static Water Adsorption	≥ wt%	/	17	17	17	17	17	17
L.O.I.	≤ %	8	8	8	8	8	8	8
Bulk Density	≤ g/ml	0.75	0.72	0.70	0.68	0.68	0.66	0.66
Surface Area	≥ m <sup>2</sup> /g	280	280	280	280	280	280	280
Pore Volume	≥ ml/g	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Crush Strength	≥ N/Pc	/	70	100	150	160	170	180
Attrition Rate	≤ wt%	/	0.3	0.3	0.3	0.3	0.3	0.3

### Activated Alumina JZ-K2

**Description:** Specially designed to increase the water adsorption and surface area.

**Application:** Air dryer / air separation systems.

**Specification:**

Item	Unit	Bead
Particle Size	mm	3-5mm
Static Water Adsorption	≥ %	22
L.O.I.	≤ %	8
Bulk Density	≤ g/ml	0.7
Surface Area	≥ m <sup>2</sup> /g	360
Pore Volume	≥ ml/g	0.3
Crush Strength	≥ N/Pc	110
Wear Rate	≤ wt%	0.3

### Ceramic Alumina Ball

**Description:** Ceramic filler show high stability, significant acid corrosion and heat resistance.

**Application:** Alumina ceramic ball is widely used in petroleum, chemical, natural gas industry. For the characteristics of a high aluminum content, making it ideal for strong acid or alkali environment.

Especially for liquefied natural gas plant.

**Specification:**

Item	Unit	Bead	
Al <sub>2</sub> O <sub>3</sub>	%	20-25	
Bulk Density	g/cm <sup>3</sup>	1.3-1.8	
Acid resistance	>%	90	
Alkali resistance	>%	80	
Water Absorption	<%	5	
Spalling Resistance	>°C	250	
refractoriness	>°C	1000	
Crush Strength	KN/Pc	φ 3≥	0.2
		φ 6≥	0.5
		φ 8≥	0.7
		φ 10≥	0.85
		φ 13≥	1.8
		φ 16≥	2.3
		φ 20≥	4.3
		φ 25≥	6.2
		φ 30≥	7
		φ 50≥	12

### Activated Alumina Carry Potassium Permanganate

**Description:** This product use special activated alumina carrier, it has double adsorption capacity than similar products. It use strong oxidizing of potassium permanganate, reducing the harmful gas from the air oxidation decomposition, so as to achieve the purpose of cleaning the air.

**Application:** Gas adsorbent, adsorption of sulfur dioxide, chlorine, NX, hydrogen sulfide and other gases.

**Specification:**

Item	Unit	JZ-M1
Size	mm	3.0-5.0/2.0-3.0
Potassium Permanganate	%	4.0-8.0
L.O.I.	≤ wt%	25
Bulk Density	≤ g/ml	1.1
Crushing Strength	≥ N/Pc	130
Water Adsorption	≥ wt%	14

### Silica Gel

**Description:** Transparent silica gel, the average pore volume is 20-30.

**Application:** Mainly used for drying and moisture proof, and also be used as catalyst carriers, adsorbents, separators and variable-pressure adsorbents etc.

**Specification:**

Item	Unit	Data
Adsorption	RH=20%	≥ 10.5
	RH=50%	≥ 23.0
	RH=80%	≥ 34.0
Heating loss	≤ %	2.0
PH	/	4-8
Specific Resistance	Ω·cm	3000
SiO <sub>2</sub> Content	≥ %	98
Particle Pass Rate	≥ %	82
Bulk Density	≥ g/L	700

### Blue/Orange Silica Gel

**Description:** This product is spherical or irregular shape. Including Blue and Orange color. And it will change color based on different humidity.

**Application:** It is mainly used as humidity indicator.

**Specification:**

Item	Unit	Blue	Orange
Particle Size	mm	2-5mm	2-5mm
Adsorption	RH 50%	18	20
	RH 90%	28	30
Wear Rate	≤%	10	10
Particle Pass Rate	≥%	90	90
Heating Loss	≤%	5	5
Color changed	RH 50%	pink	green
	RH 90%	purple/red	dark green

### Silica Alumina Gel

**Description:** Chemical molecular formula:  $m\text{SiO}_2 \cdot n\text{Al}_2\text{O}_3 \cdot x\text{H}_2\text{O}$ .

**Application:** With higher surface area and drying ability, the absorbent is being widely used in many fields. For its higher compression strength and lower rattier loss, it has longer life and higher performance-value ratio than fine-pored silica gel. As protective layer, about 20%(wt) is suggested when liquid water exits in the System

- drying of compressed air
- drying of natural gas
- drying of gas
- drying of liquefied gas

**Specification:**

Item	Unit	Silica Alumina Gel	Silica Alumina Gel(WS)
Al <sub>2</sub> O <sub>3</sub>	%	0.5-5	10-17
Specific surface area	m <sup>2</sup> /g	600-800	450
Adsorption	RH20%	9.0	3.5
	RH40%	18	6.0
	RH80%	42	30
Bulk density	g/L	650	670
Crush Strength	≥N/Pc	150	60
Pore Volume	ml/g	0.4-0.6	0.35-0.5
L.O.I.	≤wt%	3.0	3.0

### 4A ZEOLITE

**Description:** A white powder, non-toxic, odorless and good fluidity. With high Calcium exchange rate and compatibility.

- Application:**
1. Ideal phosphate-free addition that substitutes for STPP as a detergent builder.
  2. As the catalyst carrier and adsorbent. It has the bigger liquid carry quantity.

**Specification:**

Properties	Universal Type
Ignition Weightlessness (800°C, 1h)	20±1%
Calcium Exchanging Rate mgCaCO <sub>3</sub> /g (Dry) mg CaCO <sub>3</sub> /g 2 Minutes mg CaCO <sub>3</sub> /g 10 Minutes	310±10 ≥170 >200
PH Value (1%, 25 °C)	<11
Whiteness (W=Y <sub>10</sub> )	97±0.5%
Crystallinity	≥95%
Particle(μm)	2-6
+325 mesh weight of screen residue >45 μm (moist sieve)	≤0.2%
Apparent Density (g/l)	300-450
Bulk Density (g/l)	500-600
Dispersity	Good

### Soda Ash

**Description:** This product is easily soluble in the water, alkaline, reacts with acid to be salt. Appearance: white powder

**Application:** Soda ash is one of the most important raw chemicals. Widely used in manufacture of chemicals and metallurgy, medicine, petroleum, hides processing, textile, printing and dyeing, foodstuff, glass, paper industry, Synthetic detergents, water purification etc.

**Specification:**

Item	Soda Ash Light	Soda Ash Dense
Total Alkali Content (Na <sub>2</sub> CO <sub>3</sub> in dry base) ≥%	99.20	99.20
Chloride Content (NaCl in dry base) ≤%	0.70	0.70
Iron Content (Fe in dry base) ≤%	0.0035	0.0040
Water Insoluble ≤%	0.03	0.03
Sulphate (SO <sub>4</sub> in dry base) ≤%	/	0.03
Ignition Loss ≤%	0.8	0.8
Bulk Density g/ml	/	0.90

Factory



Production



Laboratory