



 Hengze Silica Gel

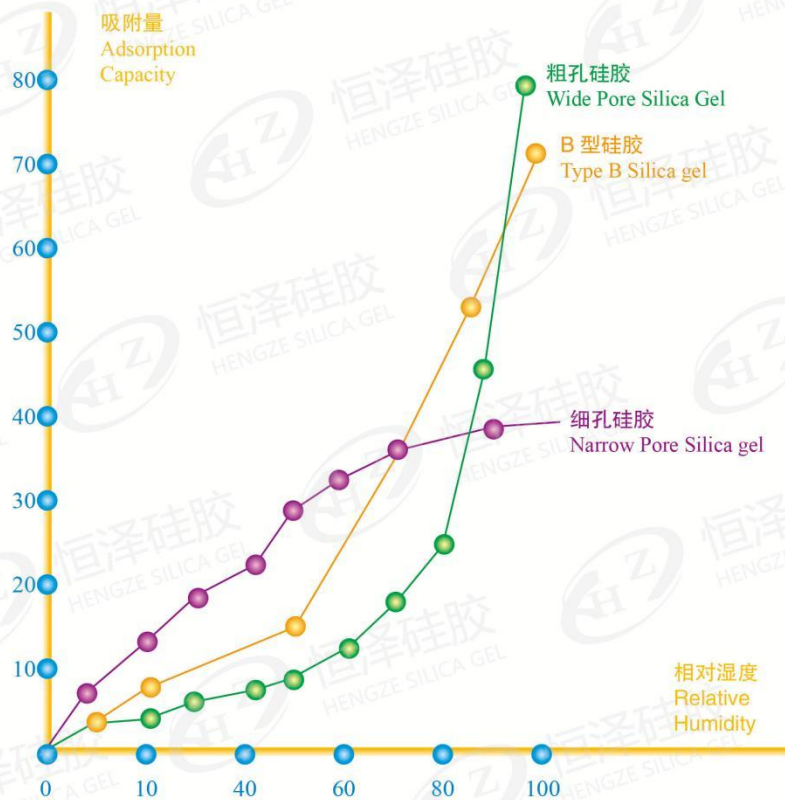
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Catalogues

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Company Profile

企业简介

青岛恒泽硅胶制品有限公司位于美丽、自由、开放的海滨城市青岛，毗邻青岛国际机场、济青高速、胶州湾跨海大桥北端口，交通便利。公司主营：柱层析硅胶、油品脱色砂、催化剂微粉硅胶、变色硅胶、硅胶干燥剂等硅胶系列产品。自创办以来，同中石化研究院、大连理工大学等科研院所保持密切联系，对产品进行不断的优化，结合客户生产需求的差异性，提供个性化定制，最大程度满足用户的需求。

公司坚持“诚实守信、务实创新、互惠共赢”的经营理念，坚持“质量第一、不断创新、客户至上”的企业宗旨，凭借优质的产品，良好的信誉，不断拓展国内及国际市场，深得客户的信赖和认可。

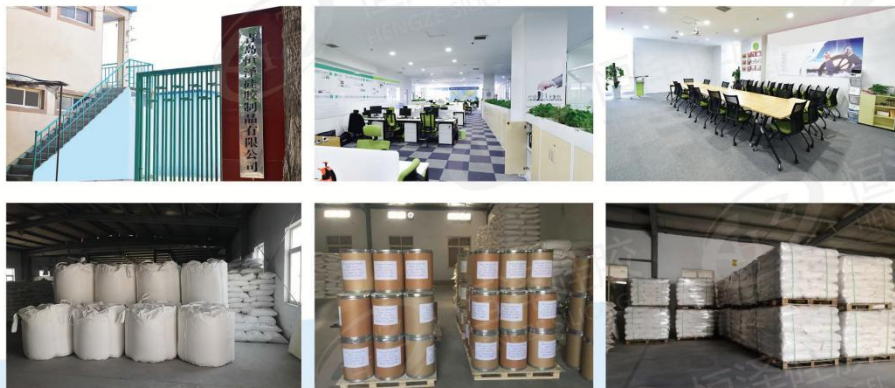
“持之以恒，深仁厚泽”，我们竭诚欢迎各方客商走进恒泽，共同发展、互惠共赢、共创辉煌！

Qingdao Hengze Silica Gel Products Co.,Ltd was established in 2014. The factory is located in Qingdao which is the home for silica gel products in China. Our main products including: Column chromatography silica gel, Silica gel for bleaching oil, Micro-powder silica gel catalyst, Macro-pored micro-spherical silica gel, Water resistant silica gel, Blue/Orange silica gel indicator, Desiccant silica gel... Our annual production comes to more than 5000MT. Main market including USA, Canada, South American countries, Indian, Indonesia, Thailand, Vietnam, South Korea as well as some European countries.

We have our own factory with professional workers, strict inspection department, and effective service teams.

We dedicate to improve our products variety and quality. We can produce customized products for our clients.

High Quality, Competitive price, Quick delivery, Effective after-sales.



Enterprise qualification

企业资质



>>> 柱层析硅胶 (A&B&C 型硅胶)

◆ 性状

柱层析硅胶为白色均匀颗粒，以优质硅胶为原料，主要成分为二氧化硅。其主要特点是能通过对混合物中的不同成分吸附保留时间的差异，达到分离提纯的目的。

◆ 用途

1. 柱层析硅胶用于中草药有效成分的分离提纯及高纯物质制备；
2. 石油制品的精制，有机气体液体的选择性吸附分离；
3. 作催化剂载体，色谱担体。



◆ 技术指示

| 项目 | 指标 | | | | | |
|----------|---|-----------|----------|---------|----------|----------|
| | 细孔柱层析硅胶 | | B 型柱层析硅胶 | | 粗孔柱层析硅胶 | |
| | 工业级 | 试剂级 | 工业级 | 试剂级 | 工业级 | 试剂级 |
| 孔径 Å | 20-30 | 20-30 | 50-80 | 50-80 | 90-100 | 90-100 |
| 孔容 ml/g | 0.35-0.45 | 0.35-0.45 | 0.5-0.7 | 0.5-0.7 | 0.85-1.0 | 0.85-1.0 |
| 比表面积 | ≥600 | ≥600 | 450-600 | 450-600 | 320-400 | 320-400 |
| 堆积密度 g/L | ≥670 | ≥670 | 500-600 | 500-600 | 400-500 | 400-500 |
| 加热减量 %≤ | 5 | 3 | 5 | 3 | 5 | 3 |
| 氯化物 %≤ | -- | 0.02 | -- | 0.02 | -- | 0.02 |
| 铁 %≤ | -- | 0.02 | -- | 0.02 | -- | 0.02 |
| 粒度规格 | 60-100 目 / 80-120 目 / 100-200 目 / 200-300 目 / 230-400 目 / 300-400 目 | | | | | |
| 包装 | 500 克 / 瓶, 1 千克 / 袋, 10 千克 / 箱, 20/25 千克 / 箱, 20 千克 / 复合袋子 | | | | | |

◆ 备注

水分，包装和规格可根据用户需求定制。

>>> Silica Gel for Column-layer Chromatography (A&B&C Type Silica Gel)

◆ Characteristics

Column chromatographic silica gel is white and uniform granules, using high quality silica gel as raw material, the main component is silicon dioxide. It's main characteristic is that it can achieve the purpose of separation and purification by the difference of adsorbing retention time of different components in mixture.

◆ Application

1. Column-layer chromatography silica gel is used for separation and purification of active ingredients of Chinese herbal medicine and preparation of high-purity substances.
2. Refining petroleum products and selective adsorption and separation of organic gases and liquids.
3. As catalyst carrier and chromatographic support.



◆ Technical Data

| Items | Specifications | | | | | |
|---|---|---------------|------------------|---------------|------------------|---------------|
| | Type-A | | Type-B | | Type-C | |
| | Industrial grade | Reagent grade | Industrial grade | Reagent grade | Industrial grade | Reagent grade |
| Pore size Å | 20-30 | 20-30 | 50-80 | 50-80 | 90-100 | 90-100 |
| Pore volume ml/g | 0.35-0.45 | 0.35-0.45 | 0.5-0.7 | 0.5-0.7 | 0.85-1.0 | 0.85-1.0 |
| Specific surface area m ² /g | ≥600 | ≥600 | 450-600 | 450-600 | 320-400 | 320-400 |
| Bulk density g/L | ≥670 | ≥670 | 500-600 | 500-600 | 400-500 | 400-500 |
| Loss on heating %≤ | 5 | 3 | 5 | 3 | 5 | 3 |
| Chlorides(Cl) %≤ | -- | 0.02 | -- | 0.02 | -- | 0.02 |
| Iron(Fe) %≤ | -- | 0.02 | -- | 0.02 | -- | 0.02 |
| Size | 60-100mesh/80-120mesh/100-200mesh/200-300mesh/230-400mesh/300-400mesh | | | | | |
| Packing | 500g/bottle, 1kg/bag, 10kg/carton, 20/25kg/carton, 20kg/compound bag | | | | | |

◆ Remark

Moisture, packing and size can be customized.

>>> 薄层层析硅胶

◆ 性状

该产品为白色粉末，不溶于水和有机溶剂，因具有对不同物质吸附保留时间上的差异，能使各种物质达到分离提纯的目的。

◆ 用途

用于石油产品精制（脱除芳烃类物质及其他有机物），液体的选择吸附分离，制造催化剂及色谱载体。也是医药、农药、染料、橡胶等柱层分析中简易、快速、灵敏的分析试剂。



◆ 技术指示

| 项目 | 指标 | | | |
|---|-------------------------------|----------|----------|----------|
| | H 型 | HF254 型 | G 型 | GF254 型 |
| 孔径 Å | 90-100 | 90-100 | 90-100 | 90-100 |
| 孔容 ml/g | 0.85-1.0 | 0.85-1.0 | 0.85-1.0 | 0.85-1.0 |
| 比表面积 m ² /g | 320-400 | 320-400 | 320-400 | 320-400 |
| 堆积密度 g/L | 400-500 | 400-500 | 400-500 | 400-500 |
| 加热减量 %≤ | 3 | 3 | 3 | 3 |
| 煅烧石膏 (CaSO ₄ ·1/2H ₂ O %) | — | — | 12-14 | 12-14 |
| 氯化物 (Cl ⁻) %≤ | 0.02 | 0.02 | 0.02 | 0.02 |
| 铁 (Fe) %≤ | 0.02 | 0.02 | 0.02 | 0.02 |
| PH 值 (10% 水悬浮物) | 6.0-7.0 | 6.0-7.0 | 6.0-7.0 | 6.0-7.0 |
| 活度 | 三色分开 | 三色分开 | 三色分开 | 三色分开 |
| 粒度 (um) | 普通: 10-40um 高效: 5-10um 3-10um | | | |
| 包装 | 白色聚乙烯熟料瓶包装, 500g/瓶, 10瓶/箱 | | | |

◆ 备注

包装可根据用户需求定制。

>>> Thin Layer Chromatography Silica Gel

◆ Characteristics

Thin layer chromatography is white powder and main content is silicon dioxide. It's insoluble in water and organic solvents. Because of the difference in retention time of different substances, it can make various substances achieve the purpose of separation and purification.

◆ Application

It is used for refinement of petroleum products (removal of aromatic hydrocarbons and other organic compounds), selective adsorption and separation of liquids, preparation of catalysts and chromatographic carriers. It is also a simple, fast and sensitive analytical reagent for column analysis of medicine, pesticides, dyes and rubber.



◆ Technical Data

| Items | Specifications | | | |
|---|--|---------------------|---------------------|---------------------|
| | Type-H | Type-HF254 | Type-G | Type-GF254 |
| Pore size Å | 90-100 | 90-100 | 90-100 | 90-100 |
| Pore volume ml/g | 0.85-1.0 | 0.85-1.0 | 0.85-1.0 | 0.85-1.0 |
| Specific surface area m ² /g | 320-400 | 320-400 | 320-400 | 320-400 |
| Bulk density g/L | 400-500 | 400-500 | 400-500 | 400-500 |
| Loss on heating %≤ | 3 | 3 | 3 | 3 |
| Alcined gypsum (CaSO ₄ ·1/2H ₂ O %) | — | — | 12-14 | 12-14 |
| Chlorides (Cl ⁻) %≤ | 0.02 | 0.02 | 0.02 | 0.02 |
| Iron (Fe) %≤ | 0.02 | 0.02 | 0.02 | 0.02 |
| PH (10% water suspended substance) | 6.0-7.0 | 6.0-7.0 | 6.0-7.0 | 6.0-7.0 |
| Activity | Tricolor separation | Tricolor separation | Tricolor separation | Tricolor separation |
| Size (um) | Normal: 10-40um High efficiency: 5-10um 3-10um | | | |
| Packing | Plastic bottle, 500g/bottle, 10 bottles/carton | | | |

◆ Remark

Packing can be customized.

>>> 薄层层析硅胶板

◆ 性状

薄层层析硅胶板是用高纯度薄层层析硅胶（粉状）调入一定量的粘结剂制成，板面纯白、平整均匀、细密。

◆ 用途

本品可直接用于多种类型有机物质的定性或定量分析，在医药、农药、中草药、有机化工产品及粮食、食品的微量杂质及主要成分的鉴定中已得到普遍应用。其中高效薄层层析硅胶更有颗粒匀、细的特点，与通用的薄层层析硅胶相比，其对物质的分离效果更好。



◆ 技术指示

| 项目 | 指标 | | | |
|-----------|-------------|-------------|-------------|-------------|
| | H 型 | HF254 型 | G 型 | GF254 型 |
| 涂板厚度 (mm) | 0.20±0.03mm | 0.20±0.03mm | 0.20±0.03mm | 0.20±0.03mm |
| 孔径 ml/g | 三色分开 | | | |
| 规格 (mm) | 小包装 (片) | 中包装 (片) | 大包装 (片) | |
| 75*25 | 80 | 320 | 1600 | |
| 100*20 | 80 | 320 | 1600 | |
| 100*50 | 40 | 160 | 800 | |
| 100*100 | 20 | 80 | 400 | |
| 200*50 | 20 | 80 | 400 | |
| 200*100 | 10 | 40 | 200 | |
| 200*100 | / | 20 | 100 | |
| 200*200 | / | 20 | 100 | |

◆ 备注

- 1、活度中的三色分开指二甲基黄、苏丹红、靛蓝。
- 2、粘合力仅限于薄层层析板硅胶 G、GF254。
- 3、储存方式：存放于干燥通风处，请勿与挥发性物质共同存放，拆封后用不完的薄层层析硅胶板应立即密封，以免吸潮或吸附其他化学物质影响分离性能。存放时间长或已经受潮的薄层层析硅胶板可在 60-90℃ 下烘干活化 1-2 小时后使用。

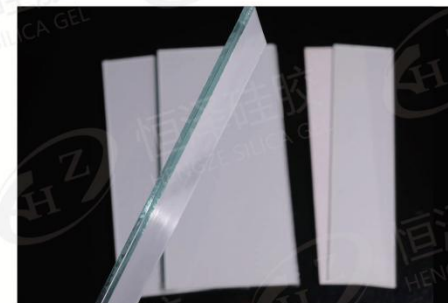
>>> Thin Layer Chromatography (TLC) Silica Gel Plate

◆ Characteristics

Thin layer chromatography (TLC) silica gel plate is made by mixing high purity TLC silica gel (powder) with a certain amount of binder. The surface of the plate is pure white, smooth and even, and finely compact.

◆ Application

This product can be directly used for qualitative or quantitative analysis of various types of organic substances. It has been widely used in the identification of trace impurities and main components in medicines, pesticides, Chinese herbal medicines, organic chemical products and food. Among them, high efficiency thin layer chromatography silica gel has the characteristics of uniform and fine particles. Compared with common thin layer chromatography silica gel, it has better separation effect on substances.



◆ Technical Data

| Items | Specifications | | | |
|----------------------|---------------------|-------------|-------------|-------------|
| | Type-H | Type-HF254 | Type-G | Type-GF254 |
| Plate thickness (mm) | 0.20±0.03mm | 0.20±0.03mm | 0.20±0.03mm | 0.20±0.03mm |
| Activation degree | Tricolor separation | | | |
| Size (mm) | S (pieces) | M (pieces) | L (pieces) | |
| 75*25 | 80 | 320 | 1600 | |
| 100*20 | 80 | 320 | 1600 | |
| 100*50 | 40 | 160 | 800 | |
| 100*100 | 20 | 80 | 400 | |
| 200*50 | 20 | 80 | 400 | |
| 200*100 | 10 | 40 | 200 | |
| 200*100 | / | 20 | 100 | |
| 200*200 | / | 20 | 100 | |

◆ Remark

1. Tricolor separation means dimethyl yellow, sudan red and indigo.
2. Adhesive force is limited to thin-layer silica gel G and GF254.
3. Storage method: Store in dry and ventilated place. Do not store together with volatile substances. Once opened, should be used up or need to be sealed immediately so as not to affect the separation performance by absorbing moisture or adsorbing other chemicals. Thin layer chromatography silica gel plate with long storage time or adsorbing moisture can be used after drying and activation for 1-2 hours at 60-90℃.

>>> 催化剂专用微粉硅胶（C型硅胶）

◆ 性状

本产品由优质硅胶为原料加工制成，特点是纯度高，杂质（尤其是重金属）含量少，粒度均匀便于催化剂的加工合成。

◆ 用途

HZSM-5 分子筛专用。



◆ 技术指标

| 项目 | 指标 |
|---|------------------------|
| 孔径 A | 90-100A |
| 孔容 ml/g | 0.85-1.0 |
| 比表面积 m ² /g | 320-400 |
| 堆积密度 g/L | 350-500 |
| 加热减量 %≤ | 8 |
| 二氧化硅含量 %≥ | 98 |
| 氧化钙 (CaO) ppm < | 600 |
| 氧化镁 (MgO) ppm < | 300 |
| 三氧化二铁 (Fe ₂ O ₃) ppm < | 600 |
| 产品规格 | ≤35 目或 ≤100 目或根据用户需要生产 |
| 粒度合格率 %≥ | 95 (或根据客户要求) |
| 包装 | 20 公斤 / 复合袋 / 箱 / 纸板桶 |

◆ 备注

包装可根据用户需求定制。

>>> Micro-powder Silica Gel for Catalyst

◆ Characteristics

This product is made from high quality silica gel. It is characterized by high purity, less impurities (especially heavy metals). The particle size is even which makes it easy to synthesize catalysts.

◆ Application

Exclusively used for synthesize HZSM-5 molecular sieve.



◆ Technical Data

| Items | Specifications |
|---|--|
| Pore size A | 90-100A |
| Pore volume ml/g | 0.85-1.0 |
| Specific surface area m ² /g | 320-400 |
| Bulk density g/L | 350-500 |
| Loss on heating %≤ | 5 |
| SiO ₂ | 90 |
| CaO ppm < | 600 |
| MgO ppm < | 300 |
| Fe ₂ O ₃ ppm < | 600 |
| Size | ≤35mesh or ≤100mesh or as client demands |
| Qualified size ratio %≥ | 95 or as client demands |
| Packing | 20kg/compound bag/carton/drum |

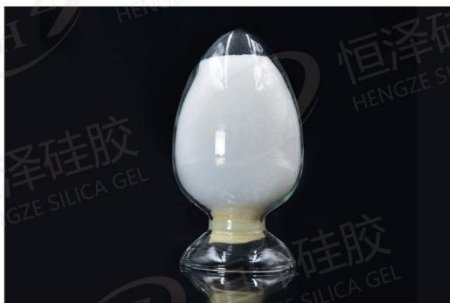
◆ Remark

Size and packing can be customized.

>>> 尿激酶吸附硅胶 (C 型硅胶)

◆ 性状

该产品为白色均匀颗粒，主要成分为二氧化硅，由优质硅胶为原料加工制成。其主要特点针对尿激酶分子结构而生产最适合的比表面与孔结构以及活性的柱层析产品，在达到分离提纯目的同时提高产品质量和收率。



◆ 用途

尿激酶专用

◆ 技术指示

| 项目 | 指标 |
|------------------------|---------------------------------------|
| 孔径 A | 90-100 |
| 孔容 ml/g | 0.85-1 |
| 比表面积 m ² /g | 300-500 |
| 堆积密度 g/L | 400-500 |
| 加热减量 %≤ | 5 |
| 吸附量 (RH=100) %≥ | 90 |
| PH 值 (100g/l 水悬浮物) | 6-8 |
| 粒度合格率 % | 协议 |
| 产品规格 | 40-100 目, 60-100 目, 40-80 目, 60-120 目 |
| 包装 | 20 公斤 / 复合袋 / 箱 / 纸板桶 |

◆ 备注

包装可根据用户需求定制。

>>> Urokinase Adsorbent Silica Gel (C Type Silica Gel)

◆ Characteristics

The product is white uniform particles, the main ingredient is silica, processed from high-quality silica gel as raw material. Its main feature is to produce the most suitable specific surface, pore structure and active column chromatography products for the molecular structure of urokinase, which can improve the product quality and yield while achieving the purpose of separation and purification.



◆ Application

Exclusively used for Urokinase.

◆ Technical Data

| Items | Specifications |
|---|---|
| Pore size A | 90-100 |
| Pore volume ml/g | 0.85-1 |
| Specific surface area m ² /g | 300-500 |
| Bulk density g/L | 400-500 |
| Loss on heating %≤ | 5 |
| Adsorption Capacity (RH=100) %≥ | 90 |
| PH (100g/l water suspended substance) | 6-8 |
| Qualified size ratio % | According to agreement |
| Size | 40-100mesh, 60-100mesh, 40-80mesh, 60-120mesh |
| Packing | 20kg/compound bag/carton/drum |

◆ Remark

Packing can be customized.

>>> 啤酒硅胶 (大孔硅胶)

◆ 性状

啤酒硅胶是一种非晶态多微孔结构的固体粉末,孔径为140-180Å,化学分子式为 $mSiO_2 \cdot nH_2O$,不溶于水和任何溶剂,除苛性碱和氢氟酸外,不与任何酸、碱、盐起反应,无毒、无味、不燃烧、不爆炸,具有强的热、冷稳定性,对人体无害。

◆ 用途

1. 啤酒硅胶具有大的比表面和无数适宜的微孔结构,可能在几分钟内把造成啤酒浑浊的蛋白质吸附,经过滤除去,可延长啤酒贮藏期 180-240 天,防止啤酒出现冷浑浊。
2. 不影响啤酒泡沫和口味。啤酒硅胶的物化性质决定了它对啤酒泡沫和口味毫无影响,实践也证明了啤酒硅胶是世界啤酒行业公认的最安全的啤酒稳定剂。
3. 提高助滤效果。啤酒硅胶化学性质稳定,不含啤酒可溶物,其表面积和多微孔结构均大大优于硅藻土,是很好的助滤剂,辅助硅藻土过滤能使啤酒更明亮、更清澈。



◆ 技术指示

| 项目 | 指标 |
|------------------------|--------------------------|
| 二氧化硅 %≥ | 98 |
| 加热减量 %≤ | 8 |
| 粒度 (d50 值) um | 7-15 |
| PH 值 | 5-8 |
| 孔容 ml/g | 1.05-1.3 |
| 孔径 Å | 140-180 |
| 比表面积 m ² /g | 250-320 |
| 重金属 (以 Pb 计) %≤ | 0.003 |
| 铅 (Pb) %≤ | 0.001 |
| 砷 (As) %≤ | 0.0003 |
| 铁 (Fe) %≤ | 0.0015 |
| 可溶性解离盐 %≤ | 0.004 |
| 包装 | 10 千克 / 袋 (复合袋包装,内衬聚乙烯袋) |

◆ 备注

1. 包装和规格可根据用户需求定制。
2. 使用啤酒硅胶后,可根据硅胶用量来适当减少细硅藻土用量,以便不影响过滤量。
3. 如过滤起压块,影响产量,我们可为用户加工过滤速度快的啤酒硅胶。

>>> Silica Gel for Beer (Super Wide Pore Silica Gel)

◆ Characteristics

It is a kind of non-crystalline micro-porous solid powder, its pore diameter is 8-16nm. Its chemical molecular formula is $mSiO_2 \cdot nH_2O$, insoluble in water or any other solvent (except the caustic alkali and hydrofluoric acid). It does not react with any acid, alkali or salt. It is nontoxic, tasteless, flame-resisting and nonexplosive. It possesses high stability under hot or cold atmosphere and is harmless to human body, mainly used in beer industry.

◆ Application

- Mainly used in beer industry.
1. It has large specific surface area and numerous fine-pored structure. It adsorbs the proteins which cause beer turbid and removes them through filtering, just within several minutes, thus prolonging beer storage period by 180-240 days and keeping beer from being cold muddy.
 2. It does not affect the beer foam or taste. Thanks to its superior physical and chemical properties, it does not have any adverse effect on the beer foam or taste. It generally recognized by the world beer industry.
 3. It helps improve the filter promoting effect. It is chemically stable, contains no beer soluble substances, its surface area and porous structure are both superior to diatomite. It is a kind of ideal filter promoter in aiding diatomite filter, making beer brighter and clearer.



◆ Technical Data

| Items | Specifications |
|---|---|
| SiO ₂ %≥ | 98 |
| Loss on heating %≤ | 8 |
| Size (d50 value) um | 7-15 |
| PH | 5-8 |
| Pore volume ml/g | 1.05-1.3 |
| Pore diameter Å | 140-180 |
| Specific surface area m ² /g | 250-320 |
| Heavy metal(Pb) %≤ | 0.003 |
| Lead (Pb) %≤ | 0.001 |
| Arsenic (As) %≤ | 0.0003 |
| Iron (Fe) %≤ | 0.0015 |
| Soluble salt %≤ | 0.004 |
| Packing | 10kg/bag (Out compound bag, inner PE bag) |

◆ Remark

1. Packing and size can be customized.
2. When silica gel is used, the amount of fine diatomite can be reduced appropriately depending on the amount of silica gel being used, so as not to affect the filtering amount.
3. If the starting filter pressure is considered too fast and affects the output, we can specially produce for our customers the beer silica gel of fast filtering speed.

>>> 细孔硅胶 (A 型硅胶)

◆ 性状

细孔硅胶包括细孔球形硅胶和细孔块状硅胶，外观呈透明或者半透明玻璃状。平均孔径 2.0-3.0nm，比表面积 650-800m²/g，孔容 0.35-0.45ml/g，比热 0.92KJ/kg.°C，导热系数 0.63KJ/m. Hr.°C。

◆ 用途

主要用于干燥、防潮，也可用于催化剂载体、吸附剂、分离剂、以及变压吸附等。



◆ 技术指示

| 项目 | | 指标 | |
|---------|-------------------|-------------------------------------|-------------|
| | | 细孔球形硅胶 | 细孔块状硅胶 |
| 吸附量 | RH=20%,%≥ | 8 | 8 |
| | RH=50%,%≥ | 20 | 20 |
| | RH=90%,%≥ | 30 | 30 |
| 堆积密度 | g/l,≥ | 720 | 670 |
| 孔容 | ml/g | 0.35-0.45 | 0.35-0.45 |
| 孔径 | Å | 20-30 | 20-30 |
| 比表面积 | m ² /g | 650-800 | 650-800 |
| 二氧化硅含量 | %≥ | 98 | 98 |
| 加热减量 | %≤ | 5.0 | 5.0 |
| PH 值 | 4-8 | *** | *** |
| 球形粒度合格率 | %≥ | 90 | *** |
| 外观 | | 半透明 | 半透明 |
| 粒度规格 | mm | 0.5-1.5mm/0.5-1mm,2-4mm/3-5mm/4-8mm | 1-4mm/2-8mm |
| 包装 | | 25 千克 / 袋 (复合袋包装, 内衬聚乙烯袋) | |

◆ 备注

水分，包装和规格可根据用户需求定制。

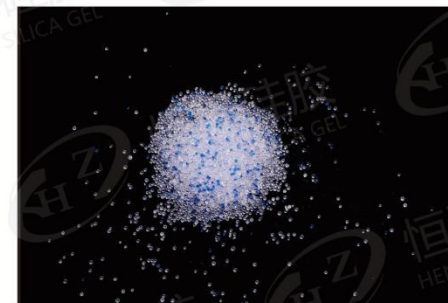
>>> Fine-pored Silica Gel(A Type Silica Gel)

◆ Characteristics

Transparent or translucent glass-like pellet or lump.
Average pore diameter: 2.0-3.0nm
Specific surface area: 650-800m²/g
Pore volume: 0.35-0.45ml/g
Specific heat: 0.92KJ/kg.°C
Thermal conductivity: 0.63KJ/m. Hr.°C

◆ Application

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



◆ Technical Data

| Items | | Specifications | |
|---------------------------------------|-------------------|---|-----------------|
| | | Silica gel pellet | Silica gel lump |
| Adsorption capacity | RH=20%, %≥ | 8 | 8 |
| | RH=50%, %≥ | 20 | 20 |
| | RH=90%, %≥ | 30 | 30 |
| Bulk density | g/l, ≥ | 720 | 670 |
| Pore volume | ml/g | 0.35-0.45 | 0.35-0.45 |
| Pore size | Å | 20-30 | 20-30 |
| Specific surface area | m ² /g | 650-800 | 650-800 |
| SiO ₂ | %, ≥ | 98 | 98 |
| Loss on heating | %, ≤ | 5.0 | 5.0 |
| PH | 4-8 | *** | *** |
| Qualified ratio of spherical granules | %, ≥ | 90 | *** |
| Appearance | | Translucent | Translucent |
| Size | mm | 0.5-1.5mm/0.5-1mm,2-4mm/3-5mm/4-8mm | 1-4mm/2-8mm |
| Packing | | 25kg/bag (Out compound bag, inner PE bag) | |

◆ Remark

Moisture, packing and size can be customized.

>>> 变压吸附硅胶 (A 型硅胶)

◆ 性状

变压吸附硅胶是一种细孔球形硅胶，外观呈透明或者半透明玻璃状。平均孔径 2.0-3.0nm，比表面积 650-800m²/g，孔容 0.35-0.45ml/g。

◆ 用途

变压吸附 (PSA) 是一项气体分离及净化的高新技术，变压吸附硅胶主要用于二氧化碳气体的回收、分离及净化，用于合成氨工业、食品饮料加工工业等制取二氧化碳，亦可用于干燥、防潮及有机产品的脱水精制等。



◆ 技术指示

| 项目 | 指标 | |
|---------------------|---------------------------|--------------------------------------|
| 吸附量 | RH=20%, %≥ | 10.5 |
| | RH=50%, %≥ | 23 |
| | RH=90%, %≥ | 36 |
| 堆积密度 | g/l, ≥ | 720 |
| 孔容 | ml/g | 0.35-0.45 |
| 孔径 | Å | 20-30 |
| 比表面积 | m ² /g | 650-800 |
| 二氧化硅含量 | %≥ | 98 |
| 加热减量 | %≤ | 2.0 |
| CO ₂ 吸附量 | cm ³ /g≥ | 20 |
| 球形粒度合格率 | %≥ | 90 |
| 抗压强度 | N≥ | 100 |
| 粒度规格 | mm | 0.5-1.5mm/0.5-1mm, 2-4mm/3-5mm/4-8mm |
| 包装 | 25 千克 / 袋 (复合袋包装, 内衬聚乙烯袋) | |

◆ 备注

包装和规格可根据用户需求定制。

>>> Pressure Swing Adsorption (PSA) Silica Gel (A Type Silica Gel)

◆ Characteristics

PSA silica gel is transparent or translucent glass-like pellet.
Average pore diameter: 2.0-3.0nm
Specific surface area: 650-800m²/g
Pore volume: 0.35-0.45ml/g

◆ Application

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



◆ 技术指示

| Items | Specifications | |
|---|---|--------------------------------------|
| Adsorption capacity | RH=20%, %≥ | 10.5 |
| | RH=50%, %≥ | 23 |
| | RH=90%, %≥ | 36 |
| Bulk density | g/l, ≥ | 720 |
| Pore volume | ml/g | 0.35-0.45 |
| Pore size | Å | 20-30 |
| Specific surface area | m ² /g | 650-800 |
| SiO ₂ | %≥ | 98 |
| Loss on heating | %≤ | 2.0 |
| Adsorption capacity for CO ₂ | cm ³ /g≥ | 20 |
| Qualified ratio of spherical granules | %≥ | 90 |
| Compressive strength | N≥ | 100 |
| Size | mm | 0.5-1.5mm/0.5-1mm, 2-4mm/3-5mm/4-8mm |
| Packing | 25kg/bag (Out compound bag, inner PE bag) | |

◆ Remark

Moisture, packing and size can be customized.

>>> 蓝色硅胶 (A 型硅胶)

◆ 性状

蓝色硅胶外观为蓝色或浅蓝色玻璃状颗粒，根据颗粒形状可分为球形和块状两种，具有吸湿后自身颜色由蓝色变分粉红色的特性。



◆ 用途

主要用于仪器、仪表、设备等在密闭条件下的防潮防锈，同时又能通过吸潮后自身颜色由蓝变红直观指示出环境的相对湿度。与普通干燥剂配合使用，指示干燥剂的吸湿程度和判断环境的相对湿度。作为包装用硅胶干燥剂，广泛用于精密仪器、皮革、鞋、服装、食品、药品和家用电器等。

◆ 技术指示

| 项目 | | 指标 | |
|---------|-------------------|---------------------------|-------------------------|
| | | 蓝胶指示剂 | 变色蓝胶 |
| 吸附量 | RH=20%,%≥ | 10 | — |
| | RH=35%,%≥ | 13 | — |
| | RH=50%,%≥ | 20 | 20 |
| 显色 | RH=20% | 蓝色或浅蓝 | — |
| | RH=35% | 紫色或紫红色 | — |
| | RH=50% | 粉色 | 粉色 |
| 堆积密度 | g/l,≥ | 720 | 720 |
| 孔容 | ml/g | 0.35-0.45 | 0.35-0.45 |
| 孔径 | Å | 20-30 | 20-30 |
| 比表面积 | m ² /g | 650-800 | 650-800 |
| 二氧化硅含量 | %≥ | 98 | 98 |
| 加热减量 | %≤ | 2.0 | 2.0 |
| PH 值 | 4-8 | 5 | 5 |
| 球形粒度合格率 | %≥ | 96 | 90 |
| 外观 | | 蓝色 | 蓝色 |
| 粒度规格 | mm | 1-3mm/2-4mm/3-5mm/4-6mm | 1-3mm/2-4mm/3-5mm/4-6mm |
| 包装 | | 25 千克 / 袋 (复合袋包装, 内衬聚乙烯袋) | |

◆ 备注

包装和规格可根据用户需求定制。

>>> Blue Silica Gel(A Type Silica Gel)

◆ Characteristics

Shape: glass-like pellets or lumps Color: blue or light blue
Turning from blue to pink after absorbing moisture.

◆ Application

Mainly used for drying and indicating the humidity, widely used in Precision instruments, Pharmaceutical industry, Petroleum industry, Chemical industry, Food industry, Clothing industry, Leather industry, Household appliances industry, Aviation industry, Military industry, High-rise buildings, Power industry, and other industrial gases.



◆ Technical Data

| Items | | Specifications | |
|---------------------------------------|-------------------|---|--------------------------------|
| | | Blue silica gel indicator | Color changing blue silica gel |
| Adsorption capacity | RH=20%, %≥ | 10 | — |
| | RH=50%, %≥ | 13 | — |
| | RH=90%, %≥ | 20 | 20 |
| Color change | RH=20% | Blue or light blue | — |
| | RH=35% | Purple or purplish red | — |
| | RH=50% | Pink | Pink |
| Bulk density | g/l, ≥ | 720 | 720 |
| Pore volume | ml/g | 0.35-0.45 | 0.35-0.45 |
| Pore size | Å | 20-30 | 20-30 |
| Specific surface area | m ² /g | 650-800 | 650-800 |
| SiO ₂ | % ≥ | 98 | 98 |
| Loss on heating | % ≤ | 2.0 | 2.0 |
| PH | 4-8 | 5 | 5 |
| Qualified ratio of spherical granules | % ≥ | 96 | 90 |
| Appearance | | Blue | Blue |
| Size | mm | 1-3mm/2-4mm/3-5mm/4-6mm | 1-3mm/2-4mm/3-5mm/4-6mm |
| Packing | | 25kg/bag (Out compound bag, inner PE bag) | |

◆ Remark

Packing and size can be customized.

>>> 橙色硅胶 (A 型硅胶)

◆ 性状

橙色硅胶分球形或不规则形状的颗粒，根据外观的不同分为紫色、桔红色或黄色三种型号，其主要成分为二氧化硅，颜色随湿度不同而变化，除具有蓝胶性能外，还具有不含氯化钴，无毒、无害的优点。

◆ 用途

主要用于干燥，指示干燥程度或湿度，广泛用于精密仪器、医药、石油化工、食品、服装、皮革、家电、航空、军工业、高层建筑、电力工业、及其它工业气体等。

◆ 技术指示



| 项目 | | 指标 | |
|---------|-------------------|---------------------------|-------------------------|
| | | 橙色硅胶 (橙变绿) | 橙色硅胶 (橙变无) |
| 吸附量 | RH=20%, %≥ | 8 | 8 |
| | RH=35%, %≥ | 14 | 14 |
| | RH=50%, %≥ | 22 | 22 |
| | RH=90%, %≥ | 30 | 20 |
| 显色 | RH=20% | 浅棕黄色 | 橙色 |
| | RH=35% | 浅棕绿色 | 浅黄色 |
| | RH=50% | 浅墨绿色 | 无色 |
| 堆积密度 | g/l, ≥ | 750 | 750 |
| 孔容 | ml/g | 0.35-0.45 | 0.35-0.45 |
| 孔径 | Å | 20-30 | 20-30 |
| 比表面积 | m ² /g | 650-800 | 650-800 |
| 二氧化硅含量 | %, ≥ | 98 | 98 |
| 加热减量 | %, ≤ | 2.0 | 2.0 |
| PH 值 | 4-8 | 5 | 5 |
| 球形粒度合格率 | %, ≥ | 96 | 90 |
| 外观 | | 橙色 | 橙色 |
| 粒度规格 | mm | 1-3mm/2-4mm/3-5mm/4-6mm | 1-3mm/2-4mm/3-5mm/4-6mm |
| 包装 | | 25 千克 / 袋 (复合袋包装, 内衬聚乙烯袋) | |

◆ 备注

包装和规格可根据用户需求定制。

>>> Orange Silica Gel(A Type Silica Gel)

◆ Characteristics

Orange silica gel classified by shape: orange silica gel beads and orange silica gel granules. If classified by color, we have purple, orange red and yellow. Its main content is silicon dioxide and it can change color to show the relative humidity in the air. Compared with blue silica gel, orange silica gel doesn't contain cobalt chloride, so it's non-toxic and harmless.

◆ Application

The product can be used alone or be mixed with other silica gel to dry and indicate the humidity. It's widely used in Precision instruments, Pharmaceutical industry, Petroleum industry, Chemical industry, Food industry, Clothing industry, Leather industry, Household appliances industry, Aviation industry, Military industry, High-rise buildings, Power industry, and other industrial gases. Orange silica gel has a strong capacity of absorption moisture. During the process of absorption moisture, the appearance of the color changes obviously according to the hygroscopic capacity. So it's often called "humidity indicator."



◆ Technical Data

| Items | | Specifications | |
|---------------------------------------|-------------------|---|-------------------------|
| | | Orange-green | Orange-null |
| Adsorption capacity, %≥ | RH=20% | 8 | 8 |
| | RH=35% | 14 | 14 |
| | RH=50% | 22 | 22 |
| | RH=90% | 30 | 20 |
| Color change | RH=20% | Light brown yellow | Orange |
| | RH=35% | Light brown green | Light yellow |
| | RH=50% | Light blackish green | Null |
| Bulk density | g/l, ≥ | 750 | 750 |
| Pore volume | ml/g | 0.35-0.45 | 0.35-0.45 |
| Pore size | Å | 20-30 | 20-30 |
| Specific surface area | m ² /g | 650-800 | 650-800 |
| SiO ₂ | %, ≥ | 98 | 98 |
| Loss on heating | %, ≤ | 2 | 2 |
| PHI | 4-8 | 5 | 5 |
| Qualified ratio of spherical granules | %, ≥ | 96 | 90 |
| Appearance | | Orange | Orange |
| Size | mm | 1-3mm/2-4mm/3-5mm/4-6mm | 1-3mm/2-4mm/3-5mm/4-6mm |
| Packing | | 25kg/bag (Out compound bag, inner PE bag) | |

◆ Remark

Packing and size can be customized.

>>> B 型硅胶

◆ 性状

B 型硅胶包括 B 型球形硅胶和 B 型块状硅胶，外观呈透明或者半透明玻璃状。平均孔径 5.0-8.0nm，比表面积 450-600m²/g。

◆ 用途

主要用作空气湿度调节剂、催化剂及催化剂载体，制作香味硅胶和饲养宠物的垫料，以及用作层析硅胶等精细化工产品的原料。



◆ 技术指示

| 项目 | | 指标 | | | |
|--------|-------------------|---------------------------|------|------|------|
| | | 球形硅胶 | | 块状硅胶 | |
| | | 优等品 | 一等品 | 优等品 | 一等品 |
| 吸附量 | RH=20%,%≥ | 4 | 3 | 4 | 3 |
| | RH=50%,%≥ | 11 | 10 | 11 | 10 |
| | RH=90%,%≥ | 70 | 50 | 70 | 50 |
| 堆积密度 | g/l,≥ | 500-600 | | | |
| 孔容 | ml/g | 0.5-0.8 | | | |
| 孔径 | Å | 50-80 | | | |
| 比表面积 | m ² /g | 450-600 | | | |
| 二氧化硅含量 | %≥ | 98 | | | |
| 比电阻 | Ω*cm, ≥ | 5000 | 3000 | 5000 | 3000 |
| 加热减量 | %≤ | 5.0 | 5.0 | 5.0 | 5.0 |
| PH 值 | 4-8 | 6.7-7.5 | | | |
| 粒度合格率 | %≥ | 90 | | | |
| 外观 | | 半透明 | | | |
| 粒度规格 | mm | 4-8mm/2-5.6mm | | | |
| 包装 | | 20 千克 / 袋 (复合袋包装, 内衬聚乙烯袋) | | | |

◆ 备注

水分, 包装和规格可根据用户需求定制。

>>> B Type Silica Gel

◆ Characteristics

B type silica gel includes spherical shape and lumpy shape, with translucent appearance. The average pore size is 5.0-8.0nm and the specific surface area is 450-600m²/g.

◆ Application

Mainly used as air humidity desiccant, catalyst or catalyst carrier, material of fragrant silica gel, underlay for pet, or as raw materials for refining chemical products such as chromatography silica gel, etc.



◆ Technical Data

| Item | | Specifications | | | |
|-----------------------------|-------------------|---|-------------|----------------|-------------|
| | | Spherical | | Lumpy | |
| | | Superior class | First class | Superior class | First class |
| Adsorption capacity | RH=20%,%≥ | 4 | 3 | 4 | 3 |
| | RH=50%,%≥ | 11 | 10 | 11 | 10 |
| | RH=90%,%≥ | 70 | 50 | 70 | 50 |
| Bulk density | g/l,≥ | 500-600 | | | |
| Pore volume | ml/g | 0.5-0.8 | | | |
| Pore size | Å | 50-80 | | | |
| Specific surface area | m ² /g | 450-600 | | | |
| SiO ₂ | %≥ | 98 | | | |
| Elec-resistance | Ω*cm, ≥ | 5000 | 3000 | 5000 | 3000 |
| Loss on heating | %≤ | 5.0 | 5.0 | 5.0 | 5.0 |
| PH | 4-8 | 6.7-7.5 | | | |
| Qualified ratio of granules | %≥ | 90 | | | |
| Appearance | | Translucent | | | |
| Size | mm | 4-8mm/2-5.6mm | | | |
| Packing | | 20kg/bag (Out compound bag, inner PE bag) | | | |

◆ Remark

Special demands can be negotiate.

>>> 粗孔硅胶 (C 型硅胶)

◆ 性状

粗孔硅胶外观呈白色。有块状，球形。平均孔径 8.0-10.0nm，比表面积 300-400m²/g，孔容 0.8-1ml/g，比热 0.92KJ/kg.℃，导热系数 0.167KJ/m. Hr.℃。



◆ 用途

1. 用于防湿包装。
2. 用于工业气体的脱水提纯。
3. 清除绝缘油中的有机酸和高聚物。
4. 工业发酵过程中吸附发酵品中的高分子蛋白。
5. 用作催化剂及催化剂载体等。

◆ 技术指示

| 项目 | | 指标 | |
|---------|-------------------|---------------------------|---------------|
| | | 球形 | 块状 |
| 吸附量 | %≥ | 78 | 78 |
| 堆积密度 | g/l≥ | 400-500 | 400-500 |
| 孔容 | ml/g | 0.8-1ml/g | 0.8-1ml/g |
| 孔径 | Å | 80-100 | 80-100 |
| 比表面积 | m ² /g | 300-400 | 300-400 |
| 二氧化硅含量 | %≥ | 98 | 98 |
| 加热减量 | %≤ | 5.0 | 5.0 |
| PH 值 | 6-8 | 6-8 | 6-8 |
| 球形粒度合格率 | %≥ | 82 | *** |
| 外观 | | 白色球形 | 白色块状 |
| 粒度规格 | mm | 2-5.6mm/4-8mm | 0.5-2mm/2-8mm |
| 包装 | | 20 千克 / 袋 (复合袋包装, 内衬聚乙烯袋) | |

◆ 备注

水分，包装和规格可根据用户需求定制。

>>> Wide Pore Silica Gel (C Type Silica Gel)

◆ Characteristics

White pellets or lumps. Average pore diameter: 8.0-10.0nm
Specific surface area: 300-400m²/g. Pore volume: 0.8-1ml/g
Specific heat: 0.92KJ/kg.℃. Thermal conductivity: 0.167KJ/m. Hr.℃

◆ Application

1. Used for moisture proof packing.
2. Used for dehydration and purification of industrial gases.
3. Used for removing the organic acids and high polymers in the insulation oils.
4. Used for adsorbing the high molecular proteins in the fermented products during the industrial fermenting process.
5. Used as catalysts and catalyst carriers, etc.



◆ 技术指示

| Item | | Specifications | |
|---------------------------------------|-------------------|---|---------------|
| | | Spherical | Lumpy |
| Adsorption capacity | %≥ | 78 | 78 |
| Bulk density | g/l≥ | 400-500 | 400-500 |
| Pore volume | ml/g | 0.8-1ml/g | 0.8-1ml/g |
| Pore size | Å | 80-100 | 80-100 |
| Specific surface area | m ² /g | 300-400 | 300-400 |
| SiO ₂ | %≥ | 98 | 98 |
| Loss on heating | %≤ | 5.0 | 5.0 |
| PH | 6-8 | 6-8 | 6-8 |
| Qualified ratio of spherical granules | %≥ | 82 | *** |
| Appearance | | White pellets | White lumps |
| Size | mm | 2-5.6mm/4-8mm | 0.5-2mm/2-8mm |
| Packing | | 20kg/bag (Out woven bags with inner plastic bags) | |

◆ Remark

Moisture, packing and size can be customized.

>>> 硅胶脱色砂 (C 型硅胶)

◆ 性状

该产品为白色颗粒，主要成分是二氧化硅，打破传统酸、碱、白土脱色除臭的复杂工艺，直接用过滤的方式滤除油品中的杂质和氧化物，集除杂、去味、脱色、分离于一体，使变黑的油品变成浅色透明的液体，加工后柴油的酸值、色度符合国家燃料标准，(GB/T6540-86)，并且长期存放不变色，不变质，稳定性好，大大节约了投资，缩短了处理流程和时间。



◆ 用途

黑臭柴油脱色、除味；废机油再生以及液压油、生物柴油、动植物油的脱色、净化与除味等。

◆ 技术指示

| 项目 | | 指标 |
|--------|-------------------|----------------------------|
| 吸附量 | RH=100%,%≥ | 90 |
| 堆积密度 | g/l,≥ | 380 |
| 孔容 | ml/g | 0.85-1 |
| 孔径 | Å | 85-110 |
| 比表面积 | m ² /g | 300-500 |
| 二氧化硅含量 | %≥ | 98 |
| 加热减量 | %≤ | 8 |
| PH 值 | 6-8 | 6-8 |
| 粒度合格率 | %≥ | 按客户要求 |
| 外观 | | 白色 |
| 粒度规格 | 目 | 20-40 目 /30-60 目 /40-120 目 |
| 包装 | | 20 千克 / 袋 (复合袋包装, 内衬聚乙烯袋) |

◆ 备注

包装和规格可根据用户需求定制。

>>> Silica Gel Sand for Oil Bleaching (C Type Silica Gel)

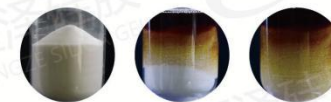
◆ Characteristics

The product is white granule, the main component is Silicon dioxide. It can filtering impurities and oxides directly in the oil by filtration, integrating impurity removal, deodorization and separation, making the blackened oil into light transparent liquid, and the acid value and color of processed diesel meet the national fuel standard (GB/T6540-86).



◆ Application

Decolorization and deodorization of black and odorous diesel oil, regeneration of waste engine oil, decolorization, purification and deodorization of hydraulic oil, biodiesel, animal and vegetable oil, etc.



◆ Technical Data

| Items | | Specifications |
|---------------------------------|-------------------|---|
| Adsorption capacity | RH=100%,%≥ | 90 |
| Bulk density | g/l,≥ | 380 |
| Pore volume | ml/g | 0.85-1 |
| Pore size | Å | 85-110 |
| Specific surface area | m ² /g | 300-500 |
| SiO ₂ | %≥ | 98 |
| Loss on heating | %≤ | 8 |
| PH | 6-8 | 6-8 |
| Qualified ratio of the granules | %≥ | According to customer's demands |
| Appearance | | White |
| Size | mesh | 20-40mesh/30-60mesh/40-120mesh |
| Packing | | 20kg/bag (Out compound bag, inner PE bag) |

◆ Remark

Packing and size can be customized.

>>> 粗孔微球硅胶 (C 型硅胶)

◆ 性状

粗孔微球硅胶外观呈白色透明或半透明状。其内部具有均匀的微孔结构，物化性能稳定、热稳定性好、机械强度高。其平均孔径为 8.0-12.0nm，比热 0.92kJ/kg°C，导热系数 0.167kJ/mhr°C。

◆ 用途

本产品在三聚氰胺、苯胺、邻甲苯胺、醋酸乙烯、苯酚、顺丁烯二酸酐、顺丁橡胶、丙烯腈等重要工业生产中用作催化剂及催化剂载体，也广泛用于石化产品的精制脱除芳烃，也可用于医药提纯及有机气体、液体的选择性吸附分离及离子交换脱除水中多价有害元素等。

◆ 产品指标

| 产品指标 | 指标 | | | | | |
|------------------------|---------------------------|--------|-------|--------|-------|--------|
| | 优等品 | | 一等品 | | 合格品 | |
| 粒度 目 | 20-40 | 40-120 | 20-40 | 40-120 | 20-40 | 40-120 |
| 粒度合格率 | 94 | 94 | 90 | 85 | 85 | 80 |
| 堆积密度 g/l ≥ | 300 | | | | | |
| 孔容 ml / g | 0.8-1.3 | | | | | |
| 孔径 Å | 80-110 | | | | | |
| 加热减量 % ≤ | 5 | | | | | |
| 吸附量 % ≥ | 90 | | | | | |
| 比表面积 m ² /g | 300-550 | | | | | |
| 外观 | 白色透明或半透明球状颗粒 | | | | | |
| 包装 | 20 千克 / 袋 (复合袋包装, 内衬聚乙烯袋) | | | | | |

◆ 备注

包装和规格可根据用户需求定制。



>>> Macro-pored Micro-spherical Silica Gel (C Type Silica Gel)

◆ Characteristics

The appearance of Macro-pored micro-spherical silica gel is white transparent or translucent. It has uniform microporous structure, stable physical and chemical properties, good thermal stability and high mechanical strength. The average pore size is 8.0-12.0 nm, the specific heat is 0.92 kJ/kg C, and the thermal conductivity is 0.167 kJ/mhr C.

◆ Application

This product is used as catalyst and catalyst carrier in the important industrial production of melamine, aniline, o-toluidine, vinyl acetate, phthalic anhydride, maleic anhydride, butadiene rubber, acrylonitrile, etc. It is also widely used in the refinement and removal of aromatic hydrocarbons from petrochemical products. It can also be used in pharmaceutical purification, selective adsorption separation of organic gases and liquids, and ion exchange for the removal of polyvalent harmful elements in water.



◆ Technical Data

| Item | Specifications | | | | | |
|--|---|--------|-------------|--------|-----------------|--------|
| | Superior class | | First class | | Qualified class | |
| Size, mesh | 20-40 | 40-120 | 20-40 | 40-120 | 20-40 | 40-120 |
| Qualified size ratio, % ≥ | 94 | 94 | 90 | 85 | 85 | 80 |
| Bulk density, g/l ≥ | 300 | | | | | |
| Pore volume, ml / g | 0.8-1.3 | | | | | |
| Pore diameter, Å | 80-110 | | | | | |
| Loss on heating, % ≤ | 5 | | | | | |
| Adsorption capacity, % ≥ | 90 | | | | | |
| Specific surface area, m ² /g | 300-550 | | | | | |
| Appearance | Translucent pellets | | | | | |
| Packing | 20kg/bag (Out compound bag, inner PE bag) | | | | | |

◆ Remark

Packing and size can be customized.

>>> 硅胶猫砂 (C 型硅胶)

◆ 性状

硅胶猫砂又被称作水晶猫砂，它是一种新型，理想的宠物垃圾清洁剂，具有以往粘土等猫砂无可比拟的优良特性。硅胶猫砂的主要成分是二氧化硅，外观呈白色颗粒状，根据客户需求可掺入不同颜色的颗粒，该产品重量轻，破碎低，无毒无污染，是一种家庭用绿色环保产品，是当今国际市场上最受欢迎的猫砂产品。



◆ 用途

吸收宠物排出的尿液、粪便中的流质和由此产生的异味并能保持干燥，能够抑制细菌生长。

◆ 技术指示

| 项目 | | 指标 |
|--------|-------------------|-------------------------------------|
| 吸附量 | %≥ | 90 |
| 堆积密度 | g/l≥ | 400-500 |
| 孔容 | ml/g | 0.8-1ml/g |
| 孔径 | Å | 80-100 |
| 比表面积 | m ² /g | 300-400 |
| 二氧化硅含量 | %≥ | 98 |
| 加热减量 | %≤ | 8 |
| PH 值 | 6-8 | 6-8 |
| 粒度合格率 | %≥ | 80 |
| 外观 | | 白色，蓝色，彩色块状 |
| 粒度规格 | mm | 0.5-2mm/1-8mm/4-8mm |
| 包装 | | 散包装 20 千克 / 袋，彩色定制包装 3.8L, 5L, 7.6L |

◆ 备注

水分，包装和规格可根据用户需求定制。

>>> Silica Gel Cat Litter (C Type Silica Gel)

◆ Characteristics

Silica gel cat litter, also called crystal cat litter, is a new and ideal pet garbage cleaner, which has unparalleled excellent characteristics of clay and other cat litter. The main component is SiO₂, which is white granular in appearance. It can also be mixed with different color particles according to customer's needs. The product is light weight, low breakage, non-toxic and non-polluting. It is a green environmental protection product for household use and is the most popular cat litter product in the international market.



◆ Application

Absorbing fluids from pet urine and feces.
Absorbing odor and keeping dry.
Inhibition of bacterial growth.

◆ Technical Data

| Items | | Specifications |
|-----------------------------|-------------------|---|
| Adsorption capacity | %≥ | 90 |
| Bulk density | g/l≥ | 400-500 |
| Pore volume | ml/g | 0.8-1ml/g |
| Pore size | Å | 80-100 |
| Specific surface area | m ² /g | 300-400 |
| SiO ₂ | %≥ | 98 |
| Loss on heating | %≤ | 8 |
| PH | 6-8 | 6-8 |
| Qualified ratio of granules | %≥ | 80 |
| Appearance | | White/blue/colored lumps |
| Size | mm | 0.5-2mm/1-8mm/4-8mm |
| Packing | | Bulk packing 20kg/bag, colored bags-3.8L, 5L, 7.6L... |

◆ Remark

Moisture, packing and size can be customized.

>>> FNG 耐水硅胶

◆ 性状

该产品为白色或灰白色颗粒，除具有普通硅胶的空隙架构和吸附性能外，还具有良好的耐水性，遇水不炸裂，使用寿命长。

◆ 用途

- 1、用于压缩空气的干燥净化、空分行业用作乙炔、二氧化碳的吸附剂。
- 2、用于石化，电力，酿造等行业液体吸附剂，催化剂载体。
- 3、用做普通硅胶保护床的缓冲干燥剂。



◆ 技术指示

| 项目 | 指标 | | | |
|------------------------|-----------------|-----------|----------|----------|
| | FNG—A | | FNG—C | |
| | 一等品 | 合格品 | 一等品 | 合格品 |
| 吸附量, %≥ | 36 | 35 | 72 | 70 |
| 孔径 ml/g | 0.35-0.45 | 0.35-0.45 | 0.85-1.0 | 0.85-1.0 |
| 孔径 Å | 20-30 | 20-30 | 85-110A | 85-110A |
| 比表面积 m ² /g | ≥600 | ≥600 | 320-400 | 320-400 |
| 堆积密度 g/L | 600—700 | 600—700 | 400—500 | 400—500 |
| 加热减量 %≤ | 3 | 5 | 3 | 5 |
| 抗压碎强度, N≥ | 98 | 68 | 98 | 68 |
| 遇水不炸裂率, %≥ | 95 | 90 | 95 | 90 |
| 粒度合格率, %≥ | 90 | 85 | 90 | 85 |
| 球形颗粒合格率, %≥ | 95 | 90 | 95 | 90 |
| 产品规格 | 3-5mm, 4-8mm | | | |
| 外观 | 白色球状 | | | |
| 包装 | 20 或 25 公斤复合袋包装 | | | |

◆ 备注

规格，包装可根据用户需求定制。

>>> FNG Silica Gel (Water Resistance/Proof Silica Gel)

◆ Characteristics

FNG silica gel is white or gray-white pellets. It has same void structure and adsorption properties with ordinary silica gel. Compared with other silica gel, it has better water resistance, no cracking in water and long service life.

◆ Application

1. Used for drying and purifying compressed air and as adsorbent for acetylene and carbon dioxide in air separation industry.
2. Liquid adsorbent and catalyst carrier for petrochemical, power and brewing industries.
3. It can be used as buffer desiccant for ordinary silica gel protective bed.



◆ Technical Data

| Items | Specifications | | | |
|---|-----------------------|-----------|-------------|-----------|
| | FNG—A | | FNG—C | |
| | First class | Qualified | First class | Qualified |
| Adsorption capacity, %≥ | 36 | 35 | 72 | 70 |
| Pore volume, ml/g | 0.35-0.45 | 0.35-0.45 | 0.85-1.0 | 0.85-1.0 |
| Pore Diameter, Å | 20-30 | 20-30 | 85-110A | 85-110A |
| Specific surface area, m ² /g | ≥600 | ≥600 | 320-400 | 320-400 |
| Bulk density, g/L | 600—700 | 600—700 | 400—500 | 400—500 |
| Loss on heating, %≤ | 3 | 5 | 3 | 5 |
| Compressive strength, N≥ | 98 | 68 | 98 | 68 |
| No cracking with water, %≥ | 95 | 90 | 95 | 90 |
| Qualified size ratio, %≥ | 90 | 85 | 90 | 85 |
| Qualified ratio of spherical granules, %≥ | 95 | 90 | 95 | 90 |
| Size | 3-5mm, 4-8mm | | | |
| Appearance | White pellets | | | |
| Packing | 20/25kg compound bags | | | |

◆ Remark

Size and packing can be customized.

>>> 硅铝胶

◆ 性状

本品化学分子式为 $m\text{SiO}_2 \cdot n\text{Al}_2\text{O}_3 \cdot x\text{H}_2\text{O}$ 。化学性质稳定，不燃烧，除强碱和氢氟酸外不溶于溶剂，具有比细孔硅胶强的表面活性，吸附分离性能优于细孔硅胶，热稳定性好。

◆ 用途

本品具有比表面高、干燥能力强的特点，是一种用途广泛的吸附剂，由于其抗压强度高、磨损低，所以比普通细孔硅胶使用寿命长，具有优良的性能价格比。

本品主要用于：

1. 干燥压缩空气。
2. 干燥天然气。
3. 干燥气体。
4. 干燥液化气。

◆ 技术指示

| 项目 | 指标 | | |
|---------|---------------------------|-----------------|------------|
| 吸附量 | RH=20%,%≥ | 10 | 9.0 |
| | RH=40%,%≥ | 20 | 18.0 |
| | RH=80%,%≥ | 35 | 42.0 |
| 堆积密度 | g/l,≥ | 720 | 650 |
| 孔容 | ml/g | 0.35-0.45 | 0.4-0.6 |
| 孔径 | Å | 20-30 | 20-30 |
| 比表面积 | m ² /g≥ | 600 | 600 |
| 二氧化硅含量 | % | 65-80 | 95-99.5 |
| 三氧化二铝含量 | % | 20-35 | 0.5-5.0 |
| 含水量 | ≤,% | 3 | 3 |
| 抗压强度 | ≥N/pcs ≥ | 200 | 150 |
| 球形粒度合格率 | ≥,% | 90 | 80 |
| 外观 | | 白色球状 | 浅黄色 |
| 粒度规格 | mm | 1-4, 3-5, 4-8mm | 1-3, 2-4mm |
| 包装 | 25 千克 / 袋 (复合袋包装, 内衬聚乙烯袋) | | |

◆ 备注

包装和规格可根据用户需求定制。



>>> Silica Alumina Gel

◆ Characteristics

The chemical formula of silica alumina gel is $m\text{SiO}_2 \cdot n\text{Al}_2\text{O}_3 \cdot x\text{H}_2\text{O}$. It has stable chemical properties, no combustion, insoluble in solvents except strong alkali and hydrofluoric acid. It has stronger surface area than micro-pored silica gel, and its adsorption and separation ability is better than micro-pored silica gel, meantime it has good thermal stability.

◆ Application

This product has the characteristics of high specific surface area and strong drying ability. It is a widely used adsorbent. Because of its high compressive strength and low wear, it has longer service life than micro-pored silica gel and has excellent performance-cost ratio. This product is mainly used for: Dry compressed air, Dry natural gas, Dry gases, Dry liquefied gas.

◆ Technical Data

| Items | Specifications | | |
|---------------------------------------|--|-----------------|--------------|
| Adsorption capacity | RH=20%,%≥ | 10 | 9.0 |
| | RH=40%,%≥ | 20 | 18.0 |
| | RH=80%,%≥ | 35 | 42.0 |
| Bulk density | g/l,≥ | 720 | 650 |
| Pore volume | ml/g | 0.35-0.45 | 0.4-0.6 |
| Pore size | Å | 20-30 | 20-30 |
| Specific surface area | m ² /g≥ | 600 | 600-800 |
| SiO ₂ | % | 65-80 | 95-99.5 |
| Al ₂ O ₃ | % | 20-35 | 0.5-5.0 |
| Moisture | ≤,% | 3 | 3 |
| Compressive strength | ≥N/pcs ≥ | 200 | 150 |
| Qualified ratio of spherical granules | ≥,% | 90 | 80 |
| Appearance | | White beads | Light yellow |
| Size | mm | 1-4, 3-5, 4-8mm | 1-3, 2-4mm |
| Packing | 25kg/bag (Out compound bags with PE inner bag) | | |

◆ Remark

Size and packing can be customized.



>>> 硅溶胶

◆ 性状

硅溶胶是二氧化硅纳米级粒子在水中形成的胶体，无臭、无毒，乳白色，二氧化硅胶体粒子微小(10~20nm)；具有高比表面积，粒子本身无色透明，不影响被覆盖物的本色，和其它物质混合时分散性和渗透性非常好；当硅溶胶水份蒸发时，胶体粒子牢固地附着在物质表面，粒子间形成硅氧结合，是很好的粘合剂。

◆ 用途

广泛应用于精密铸造、造纸、纺织、涂料和耐火材料等行业，也用于矽钢片处理剂、电池固体电解质、催化剂载体、防滑剂等。



◆ 技术指示

| 型号 指标 | 二氧化硅 ω/% | 氧化钠 ω/% ≤ | PH 值 | 黏度 (25℃) / mPa · s ≤ | 密度 (25℃) / (g/cm ³) | 平均粒径 / nm | C1< ppm |
|----------|-------------|--------------|----------|-------------------------|------------------------------------|--------------|---------|
| JN-15 | 15-16 | 0.70 | 9.0-11.0 | 5 | 1.09-1.11 | 6-8 | |
| JN-20 | 20-21 | 0.50 | 9.0-11.0 | 6 | 1.12-1.14 | 10-20 | |
| JN-25 | 25-26 | 0.30 | 9.0-10.0 | 6 | 1.15-1.17 | 10-20 | |
| JN-30 | 30-31 | 0.30 | 9.0-10.0 | 7 | 1.19-1.21 | 10-20 | |
| JN-40 | 40-41 | 0.60 | 9.0-10.5 | 25 | 1.28-1.30 | 10-20 | |
| SW-20 | 20-21 | 0.04 | 2.0-4.0 | 5 | 1.12-1.14 | 10-20 | |
| SW-25 | 25-26 | 0.05 | 2.0-4.0 | 6 | 1.15-1.17 | 10-20 | |
| SW-30 | 30-31 | 0.06 | 2.0-4.0 | 7 | 1.19-1.21 | 10-20 | |
| JA-30 | 30-31 | 0.06 | 8.5-10.0 | 7 | 1.19-1.21 | 10-20 | |
| JA-30/40 | 40-41 | 0.10 | 9.0-10.0 | 12 | 1.28-1.30 | 20-30 | |
| ZX-25 | 25-26 | 0.10 | 6.0-8.0 | 6 | 1.15-1.17 | 10-20 | |
| ZX-30 | 30-31 | 0.12 | 6.0-8.0 | 7 | 1.19-1.21 | 10-20 | |
| JGC-25 | 25-26 | 0.30 | 9.0-10.0 | 7 | 1.15-1.17 | 8-16 | 30 |
| JGC-30 | 30-31 | 0.30 | 9.0-10.0 | 8 | 1.19-1.21 | 10-20 | 30 |

◆ 备注

包装和规格可根据用户需求定制。

>>> Colloid Silica/Silica Sol

◆ Characteristics

Silica sol is a colloid formed by silica nano particles in water, odorless, non-toxic, milky white color. Fine silica colloidal particles size is 10-20nm with high specific surface area. The particles are transparent, so they will not affect the color of the covered material. If mix silica sol with other substances, the dispersion and permeability are very good. When the silica sol evaporates, the colloidal particles firmly adhere to the surface of the material and form silica-oxygen bonding between the particles, which is a good adhesive.

◆ Application

It is widely used in precision casting, paper-making, textile, coating and refractory industries. It is also used in silicon steel sheet treatment agent, battery solid electrolyte, catalyst carrier, anti-skid agent, etc.



◆ Technical Data

| Type Spec | SiO ₂ ω/% | Na ₂ O ω/% ≤ | PH | Viscosity(25℃) / mPa · s ≤ | Density(25℃) / (g/cm ³) | Ave grain Dia/nm | C1< ppm |
|--------------|----------------------|----------------------------|----------|-------------------------------|--|---------------------|---------|
| JN-15 | 15-16 | 0.70 | 9.0-11.0 | 5 | 1.09-1.11 | 6-8 | |
| JN-20 | 20-21 | 0.50 | 9.0-11.0 | 6 | 1.12-1.14 | 10-20 | |
| JN-25 | 25-26 | 0.30 | 9.0-10.0 | 6 | 1.15-1.17 | 10-20 | |
| JN-30 | 30-31 | 0.30 | 9.0-10.0 | 7 | 1.19-1.21 | 10-20 | |
| JN-40 | 40-41 | 0.60 | 9.0-10.5 | 25 | 1.28-1.30 | 10-20 | |
| SW-20 | 20-21 | 0.04 | 2.0-4.0 | 5 | 1.12-1.14 | 10-20 | |
| SW-25 | 25-26 | 0.05 | 2.0-4.0 | 6 | 1.15-1.17 | 10-20 | |
| SW-30 | 30-31 | 0.06 | 2.0-4.0 | 7 | 1.19-1.21 | 10-20 | |
| JA-30 | 30-31 | 0.06 | 8.5-10.0 | 7 | 1.19-1.21 | 10-20 | |
| JA-30/40 | 40-41 | 0.10 | 9.0-10.0 | 12 | 1.28-1.30 | 20-30 | |
| ZX-25 | 25-26 | 0.10 | 6.0-8.0 | 6 | 1.15-1.17 | 10-20 | |
| ZX-30 | 30-31 | 0.12 | 6.0-8.0 | 7 | 1.19-1.21 | 10-20 | |
| JGC-25 | 25-26 | 0.30 | 9.0-10.0 | 7 | 1.15-1.17 | 8-16 | 30 |
| JGC-30 | 30-31 | 0.30 | 9.0-10.0 | 8 | 1.19-1.21 | 10-20 | 30 |

◆ Remark

Size and packing can be customized.
If average grain diameter < 10, buyer and seller need to get agreement on the viscosity.

>>> 活性氧化铝球

◆ 简介

球形活性氧化铝吸附剂为白色球状多孔性颗粒，活性氧化铝粒度均匀，表面光滑，机械强度高，吸湿性强，吸水后不胀不裂保持原状，无毒、无嗅、不溶于水、乙醇。活性氧化铝是一种微量水深度干燥的高效干燥剂。非常适用于无热再生装置。

◆ 产品信息

名称：活性氧化铝球
规格：3-5/4-6/5-8mm
氧化铝含量：98%
外观：雪白球状



◆ 产品特点

催化剂中使用氧化铝 (Al_2O_3) 的通常专称为活性氧化铝，它是一种多孔性、高分散度的固体材料，有很大的表面积，其微孔表面具备催化作用所要求的特性，如吸附性能、除氟性能、干燥性能、表面活性、优良的热稳定性等，所以广泛地被用作家庭干燥剂以及化学反应的催化剂和催化剂载体。

◆ 作用

活性氧化铝对气体、水蒸气和某些液体的水分有选择吸附本领。吸附饱和后可在约 175-315℃ 加热除去水而复活。吸附和复活可进行多次。除用作干燥剂外，还可从污染的氧、氢、二氧化碳、天然气等中吸附润滑油的蒸气。并可用作催化剂和催化剂载体和色谱分析载体。

活性氧化铝属于化学品氧化铝范畴，主要用于吸附剂、净水剂、催化剂及催化剂载体，根据不同的用途，其原料和制备方法不同。

◆ 影响活性氧化铝吸附性能的主要因素

- (1) 颗粒粒径：粒径越小，吸附容量越高，但粒径越小，颗粒强度越低，影响其使用寿命。
- (2) 原水 PH 值：当 PH 值大于 5 时，PH 值越低，活性氧化铝吸附容量越高。
- (3) 原水碱度：原水中重碳酸根浓度高，吸附容量将降低。
- (4) 氯离子和硫酸根离子。
- (5) 砷的影响：活性氧化铝对水中的砷有吸附作用，砷在活性氧化铝上的积聚造成对氟离子吸附容量的下降，且使再生时洗脱砷离子比较困难。

◆ 备注

包装和规格可根据用户需求定制。

| 检验项目 | 标准要求 | 检验结果 |
|---------------------------|-------|-------|
| 型 号 | 球形 | 球形 |
| 三氧化二铝质量分数 | ≥92 | 92.1 |
| 二氧化硅 (%) | ≤0.1 | 0.072 |
| 氧化亚铁 (%) | ≤0.04 | 0.032 |
| 氧化钠 (%) | ≤0.5 | 0.49 |
| 灼烧失量 (%) | ≤8.0 | 6.8 |
| 振实密度 (g/cm ³) | ≥0.65 | 0.66 |
| 比表面积 (m ² /g) | ≥280 | 306 |
| 孔 容 (cm ³ /g) | ≥0.40 | 0.42 |
| 抗压强度 (N/G) | ≥130 | 151 |
| 吸水 (%) | ≥50 | 52 |
| 磨损率 (%) | ≤0.5 | 0.1 |
| 粒度合格率 (%) | ≥90 | 95 |

>>> Activated Alumina Ball

◆ Characteristics

The spherical activated alumina adsorbent is a white spherical porous particle. Activated alumina is with uniform particle size, smooth surface, high mechanical strength and strong hygroscopicity. It will not swell or crack and will remain intact after absorbing water. It is non-toxic, odorless and insoluble in water and ethanol. Activated alumina is an efficient desiccant for deep drying of trace water. It is very suitable for non-thermal regeneration device.

Alumina (Al_2O_3) used in catalysts is commonly referred to as activated alumina. It is a porous, highly dispersed solid material with a large surface area. Its microporous surface has the characteristics required by catalysis, such as adsorption, fluoride removal and drying. Because of its properties, surface activity and excellent thermal stability, it has been widely used as home desiccant, catalyst and catalyst carrier for chemical reaction.



◆ Application

Activated alumina can selectively adsorb water in gases, vapors and some liquids. When the adsorption is saturated, the water can be removed and reactivated by heating at about 175-315 °C. Adsorption and reactivation can be carried out many times. In addition to being used as a desiccant, it can also absorb the vapor of lubricating oil from contaminated oxygen, hydrogen, carbon dioxide, natural gas, etc. It can also be used as catalyst, catalyst carrier and chromatographic analysis carrier.

Activated alumina belongs to the category of chemical alumina. It is mainly used for adsorbents, water purifiers, catalysts and catalyst carriers. According to different uses, its raw materials and preparation methods are different.

◆ Appearance

Name: Activated alumina balls
Size: 3-5/4-6/5-8/8-12/12-20mm
AL₂O₃ content: 98%
Appearance: white ball type

| Test Item | SPEC | Test Result |
|------------------------------------|-------|-------------|
| Type | Beads | Beads |
| Al ₂ O ₃ (%) | ≥92 | 92.1 |
| SiO ₂ (%) | ≤0.1 | 0.072 |
| Fe ₂ O ₃ (%) | ≤0.04 | 0.032 |
| Na ₂ O (%) | ≤0.5 | 0.49 |
| LOI (%) | ≤8.0 | 6.8 |
| Bulk Density (g/cm ³) | ≥0.65 | 0.66 |
| BET (m ² /g) | ≥280 | 306 |
| Pore Volume (cm ³ /g) | ≥0.40 | 0.42 |
| Crush Strength(N/G) | ≥130 | 151 |
| Water adsorption (%) | ≥50 | 52 |
| Loss on Attrition (%) | ≤0.5 | 0.1 |
| Qualified Size (%) | ≥90 | 95 |

◆ Factors that will affect the adsorption of Activated alumina balls

- (1) Particle size: The smaller the particle size, the higher the adsorption capacity, but the smaller the particle size, the lower the particle strength, affecting its service life.
- (2) PH value of raw water: When the PH value is greater than 5, the lower the PH value, the higher the adsorption capacity of activated alumina.
- (3) Raw water alkalinity: High bicarbonate concentration in raw water will reduce the adsorption capacity.
- (4) Chloride ion and sulfate ion.
- (5) The effect of arsenic: Activated alumina can adsorb arsenic in water. The accumulation of arsenic on activated alumina results in a decrease in the adsorption capacity of fluoride ions, and makes it difficult to elute arsenic ions during regeneration.

◆ Remark

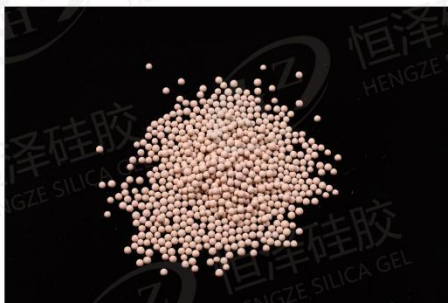
Size and packing can be customized.

>>> 分子筛

◆ 性状

4A 分子筛的孔径为 4Å，吸附水，甲醇、乙醇、硫化氢、二氧化硫、二氧化碳、乙烯、丙烯，不吸附直径大于 4Å 的任何分子（包括丙烷），对水的选择吸附性能高于任何其他分子。是工业上用量最大的分子筛品种之一。

分子式： $\text{Na}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot 2.0\text{SiO}_2 \cdot 4.5\text{H}_2\text{O}$



◆ 用途

空气、天然气、烷烃、制冷剂等气体和液体的深度干燥
氙气的制取和净化
药品包装、电子元件和易变质物质的静态干燥
油漆、燃料、涂料中作为脱水剂

◆ 技术指示

| 性能 | 单位 | 技术指标 | | | |
|-------|---|---------|---------|---------|---------|
| | | 条形 | | 球形 | |
| 直径 | mm | 1.5-1.7 | 3.0-3.3 | 1.7-2.5 | 3.0-5.0 |
| 粒度合格率 | % | ≥98 | ≥98 | ≥98 | ≥98 |
| 堆积密度 | g/ml | ≥0.66 | ≥0.66 | ≥0.70 | ≥0.70 |
| 磨耗率 | % | ≤0.20 | ≤0.40 | ≤0.20 | ≤0.20 |
| 抗压强度 | N | ≥30/cm | ≥45/cm | ≥30/p | ≥70/p |
| 静态水吸附 | % | ≥21 | ≥21 | ≥21 | ≥21 |
| 甲醇吸附 | % | ≥15 | ≥15 | ≥15 | ≥15 |
| 包装水含量 | % | ≤1.5 | ≤1.5 | ≤1.5 | ≤1.5 |
| 包装 | 25KG 或 30KG 纸箱包装，内真空包装 25KG 或 30KG 纸桶包装，内真空包装 50KG 或 150KG 铁桶包装，内真空包装 | | | | |

◆ 备注

分子筛在使用前应防止吸附水、有机气体或液体，否则，应予以再生。

>>> Molecular Sieve

◆ Characteristics

The pore size of 4A Molecular Sieve is 4Å. It adsorbs water, methanol, ethanol, hydrogen sulfide, sulfur dioxide, carbon dioxide, ethylene and propylene. It does not adsorb any molecule with diameter more than 4Å (including propane). Its selective adsorbability to water is higher than that of any other molecule. It is one of the most widely used molecular sieves in industry.

Molecular formula: $\text{Na}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot 2.0\text{SiO}_2 \cdot 4.5\text{H}_2\text{O}$

◆ Application

Deep drying of gases and liquids such as air, natural gas, alkanes and refrigerants
Production and Purification of Argon
Static Drying of Pharmaceutical Packaging, Electronic Components and Perishable Substances
Use as dehydrating agent in paint, fuel and coatings



◆ Technical Data

| Item | Unit | Specifications | | | |
|-------------------------|--|----------------|---------|---------|---------|
| | | Strip | | Pellet | |
| Appearance | | | | | |
| Diameter | mm | 1.5-1.7 | 3.0-3.3 | 1.7-2.5 | 3.0-5.0 |
| Qualified size ratio | % | ≥98 | ≥98 | ≥98 | ≥98 |
| Bulk density | g/ml | ≥0.66 | ≥0.66 | ≥0.70 | ≥0.70 |
| Rattle loss | % | ≤0.20 | ≤0.40 | ≤0.20 | ≤0.20 |
| Compressive strength | N | ≥30/cm | ≥45/cm | ≥30/p | ≥70/p |
| Static water adsorption | % | ≥21 | ≥21 | ≥21 | ≥21 |
| Methanol adsorption | % | ≥15 | ≥15 | ≥15 | ≥15 |
| Water content | % | ≤1.5 | ≤1.5 | ≤1.5 | ≤1.5 |
| Packing | 25KG or 30KG carton packing, inner vacuum packing. 25KG or 30KG cardboard bucket packing, inner vacuum packing. 50KG or 150KG Iron bucket packing, inner vacuum packing. | | | | |

◆ Remark

Molecular sieves should be prevented from adsorbing water, organic gases or liquids before use, otherwise they should be regenerated.

>>> 废机油专用催化剂

◆ 新型专业废机油炼油催化剂

| 形状 | 单位 | 条形 | |
|------|-------------------|-----------|---------|
| | | A | B |
| 尺寸 | mm | Φ2.5×2-10 | Φ3×2-10 |
| 孔容 | ml/g | ≥0.30 | ≥0.28 |
| 比表面积 | m ² /g | ≥235 | ≥250 |
| 压碎强度 | N/cm | ≥125 | ≥130 |
| 堆积密度 | kg/l | ≥0.68 | ≥0.7 |
| 磨损 | wt% | ≤1 | ≤1 |



◆ 原料油要求（前期预处理）

| 项目 | 单位 | 技术指标 |
|---------|------|-----------|
| 密度 | g/ml | 0.88-0.90 |
| 流程 | °C | 200-500 |
| 水分 | % | 无 |
| 胶质沥青质含量 | % | 尽量少 |
| 机械杂质 | % | 无 |

◆ 催化剂的装填

1) 准备工作
准备好所需的不锈钢球和催化剂，所需的每种材料的数量应事先确定好。

准备好所需要的催化剂装料斗。

检查反应器内件，主要包括：出口集管管和卸催化剂短管是否安装妥善。反应器底部没有水，积垢、垃圾等。

2) 装填

用袋子通过反应器入口管嘴放入惰性瓷球，装完后用工具进行平整。

装催化剂用30目的筛网筛去细粉。在反应器入口法兰装上催化剂装料斗，装料帆布管末端在催化剂床层以上300mm处。在装料过程中对催化剂进行及时平整，直至把催化剂装填到设计高度，并避免催化剂局部高度超过150mm。最后把惰性瓷球装直规定的位置。

3) 装上反应器分布盘。

4) 上好反应器盖子。

5) 封闭好反应器，保护好催化剂。

◆ 催化剂使用

| | | |
|------|-------------------------------------|----------|
| 空速 | h ⁻¹ (m ³ /m) | 0.2-0.25 |
| 反应温度 | °C | 290-440 |
| 反应压力 | MPa | 常压 |

◆ SYFJ-4A&SYFJ-4B 催化剂使用要求

- 1) 催化剂不能受潮，不能与强酸、碱接触
- 2) 催化剂装填前用30目筛网筛去粉末
- 3) 催化剂使用时先将催化剂升温到290-310°C，然后开始进料，并严格控制反应温度在300-430°C之间
- 4) 催化剂在使用过程中根据产品质量调整操作，当产品质量符合要求时尽量维持低的反应温度
- 5) 如果装置间断操作，停止进料后用0.4-0.6MPa蒸汽或者氮气吹扫8-12小时
- 6) 反应温度达到440°C以后，且产品不符合要求时，催化剂需要再生处理

◆ 催化剂包装、标志、运输、储存

- 1) 本产品采用内衬塑料袋，外用塑料编织袋包装
- 2) 本产品有较强的吸水性，在运输过程中注意防潮
- 3) 本产品在储存过程中要避免接触酸碱及其它化学品，也不宜露天存放

>>> Catalyst for Waste Engine Oil Refining

◆ New type catalyst for refining waste engine oil

| Shape | Unit | Strip | |
|-----------------------|-------------------|-----------|---------|
| | | A | B |
| Size | mm | Φ2.5×2-10 | Φ3×2-10 |
| Pore size | ml/g | ≥0.30 | ≥0.28 |
| Specific surface area | m ² /g | ≥235 | ≥250 |
| Crush strength | N/cm | ≥125 | ≥130 |
| Bulk density | kg/l | ≥0.68 | ≥0.7 |
| Rattle loss | wt% | ≤1 | ≤1 |



◆ Raw oil requirements (pre-treatment)

| Item | Unit | Technical Data |
|-----------------------|------|-----------------------|
| Density | g/ml | 0.88-0.90 |
| Technological process | °C | 200-500 |
| Moisture | % | Null |
| Gum asphaltic content | % | as little as possible |
| Mechanical impurity | % | Null |

◆ Use of the catalyst

| | | |
|----------------------|-------------------------------------|----------------------|
| Space velocity | h ⁻¹ (m ³ /m) | 0.2-0.25 |
| Reaction temperature | °C | 290-440 |
| Reaction pressure | MPa | Atmospheric pressure |

◆ SYFJ-4A&SYFJ-4B application requirement

- 1) The catalyst shall not be damped or contacted with strong acid or alkali.
- 2) Before loading catalyst, use 30 mesh screen to remove the powder.
- 3) When the catalyst is used, raise the temperature of the catalyst to 290-310 °C, then the feed is started, and the reaction temperature is strictly controlled between 300-430 °C.
- 4) The operation of catalyst is adjusted according to the product quality in the use process. When the product quality meets the requirements, the reaction temperature shall be kept as low as possible.
- 5) If the unit is operated intermittently, blow with 0.4-0.6mpa steam or nitrogen for 8-12 hours after stopping feeding.
- 6) When the reaction temperature reaches 440 °C and the product does not meet the requirements, the catalyst needs to be regenerated.

◆ Packaging, marking, transportation and storage

- 1) The product is lined with plastic bags and packed with plastic woven bags.
- 2) The product has a strong water absorption, pay attention to moisture-proof during transportation.
- 3) The product should not contact with acid, alkali and other chemicals during storage, and should not be stored in the open air.

◆ Catalyst loading

1) Preparation:
Prepare the required inert ceramic balls and catalysts, and determine the quantity of each material in advance. Prepare the required catalyst hopper.

Check the reactor internals, mainly including: whether the outlet manifold and catalyst unloading short pipe are installed properly. There is no water, scale, garbage, etc. at the bottom of the reactor.

2) Filling

Put the inert ceramic ball into the bag through the reactor inlet nozzle, and level it with tools after loading.

The catalyst is loaded and the fine powder is removed by 30 mesh screen. Install the catalyst loading hopper on the inlet flange of the reactor, and the end of the loading canvas pipe is 300 mm above the catalyst bed. During the loading process, the catalyst shall be leveled in time until the catalyst is loaded to the designed height, and the local height of catalyst shall not exceed 150 mm. Finally, install the inert ceramic ball in the specified position.

3) Install the reactor distribution plate.

4) Put on the reactor cover.

5) Close the reactor and protect the catalyst.

◆ Catalyst application

1) Catalyst drying

The catalyst is a porous material with large specific surface and strong water absorption. Therefore, it is necessary to dry the catalyst under the following drying conditions:

| | |
|--------------|-----------------|
| Pressure | 0-0.1MPa |
| Medium | Air |
| Temperature | 300-360°C |
| Heating rate | 15-30 °C / hour |
| Drying time | 6-8 hours |

2) Application method

When the reactor bed temperature reaches 260 °C, it starts to pass through the hot steam, and when the temperature reaches 300 °C, it starts to feed oil.