ExtensiveJoyful Chemical

High Performance Chemicals for
Oil and Gas Production

Chemical Adsorbents and Catalysts

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- The H2S Removal Solutions Experts
- Outstanding H2S Removal

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广怡化学有限公司

EXTENSIVE JOYFUL CHEMICAL LIMITED

关于我们

广怡化学是全球领先的H2S吸附剂和脱硫设备供应商，在石油、天然气、沼气和绿色能源行业，我们致力于硫化氢的脱除，服务全球客户20多年，公司将可持续发展原则贯穿研发、生产、销售和物流的每个环节。所有生产基地的运行都符合国际安全、质量和环境标准。

About Us

Extensive Joyful Chemical Limited,We are a leading global supplier of H2S adsorbents , Catalysts and and removal equipment. In the oil, natural gas, biogas, and green energy industries, we are committed to the removal of hydrogen sulfide and have served global customers for over 20 years. We adhere to the principle of sustainable development in R&D, Production,Marketing and Logistics, etc.International Safety, Quality and Environmental standards are comprehensively adhered to within our manufacturing sites.

H2S Removal Adsorbents

EJ-101 Iron Oxide Adsorbents

Product Applications

EJ-101 with iron (III) oxide-hydroxide as the primary chemical component, with high desulfurization accuracy and fast reaction rate,and is widely used for removing hydrogen sulfide form natural gas,shale gas,renewabl gas,biogas, to effectively eliminate H2S from various sources. It is designed to accelerate H2S removal,extend equipment longevity,reduce operational costs,and maximize output and profitability.

Main Technical Indexes

Sulfur capacity	⩾15%
Size (mm)	D(4mm)x(5-30mm)
Strength (N/cm)	⩾60
Density (kg/m³)	0.75～0.85

Using conditions

Applicable temperature (℃)	10-80
Pressure Mpa	normal pressure～10
Airspeed	500～1500h-1
Export hydrogen sulfide content (mg/m³)	⩽ 1.0

H2S Removal Adsorbents

EJ-102 Iron Oxide Adsorbents

Product Applications

EJ-102 with iron (III) oxide-hydroxide as the primary chemical component, with high desulfurization accuracy and fast reaction rate,and is widely used for removing hydrogen sulfide form natural gas,shale gas,renewabl gas,biogas, to effectively eliminate H2S from various sources. It is designed to accelerate H2S removal,extend equipment longevity,reduce operational costs,and maximize output and profitability.

Main Technical Indexes

Sulfur capacity	⩾25%
Size (mm)	D(4mm)x(5-30mm)
Strength (N/cm)	⩾60
Density (kg/m^3)	0.75～0.85

Using conditions

Applicable temperature (℃)	10-80
Pressure Mpa	normal pressure～10
Airspeed	500～1500h-1
Export hydrogen sulfide content (mg/m^3)	⩽ 1.0

H2S Removal Adsorbents

EJ-103 Iron Oxide Adsorbents

Product Applications

EJ-103 with iron (III) oxide-hydroxide as the primary chemical component, with high desulfurization accuracy and fast reaction rate,and is widely used for removing hydrogen sulfide form natural gas,shale gas,renewabl gas,biogas, to effectively eliminate H2S from various sources. It is designed to accelerate H2S removal,extend equipment longevity,reduce operational costs,and maximize output and profitability.

Main Technical Indexes

Sulfur capacity	⩾30%
Size (mm)	D(4mm)x(5-30mm)
Strength (N/cm)	⩾60
Density (kg/m^3)	0.75～0.85

Using conditions

Applicable temperature (℃)	10-80
Pressure Mpa	normal pressure～10
Airspeed	500～1500h-1
Export hydrogen sulfide content (mg/m^3)	⩽ 1.0

H2S Removal Adsorbents

EJ-202 Iron Oxide Adsorbents

Product Applications

EJ-202 with iron (III) oxide-hydroxide as the primary chemical component, with high desulfurization accuracy and fast reaction rate,and is widely used for removing hydrogen sulfide form natural gas,shale gas,renewabl gas,biogas, to effectively eliminate H2S from various sources. It is designed to accelerate H2S removal,extend equipment longevity,reduce operational costs,and maximize output and profitability.

Main Technical Indexes

Sulfur capacity	⩾40%
Size (mm)	D(4mm)x(5-30mm)
Strength (N/cm)	⩾60
Density (kg/m^3)	0.75～0.85

Using conditions

Applicable temperature (℃)	10-80
Pressure Mpa	normal pressure～10
Airspeed	500～1500h-1
Export hydrogen sulfide content (mg/m^3)	⩽ 1.0

H2S Removal Adsorbents

EJ-504 Zinc Oxide Adsorbents

- EJ-504 is a zinc oxide based adsorbent for the removal of H2S.

The mechanism of adsorption can be described as follows:

$$ZnO + H2S \rightarrow ZnS + H2O$$

Product Applications

EJ-504 is specifically used for the adsorption of H2S from different streams containing either hydrocarbons or hydrogen or mixtures thereof.
The content of H2S can be decreased to below 0.1 ppm through treatment of EJ-504. At the same time,it can also convert and adsorb some simple organic sulfur compounds, such as COS and CS2. EJ-504 possesses the features of high adsorption amount of sulfur, high activity and high mechanical strength, enduring high water steam ratio, even at harsh conditions; it can maintain very high activity and sulfur adsorption capacity.

Chemical Analysis

Zinc Oxide(ZnO)	⩾ 95%
Penetrating Sulfur Capacity 350℃ (%)	31

Physical Analysis

Surface Area (m^2/g)	⩾ 50
Bulk Density (g/ml)	0.9～1.2
Average Crushing Strength (N/cm)	⩾60

Sulfur Recovery Catalysts

EJ-618

Product Applications

EJ-618 is a artificial synthesizing active Al_2O_3 catalyst, which possess stronger performance of anti-sulfated poison, higher hydrolysis function of organic sulphur compounds and better character of heat steady,have the advantages of high activity and crush strength.

Physical Properties

Size (N/cm)	φ4-6
Pole Volume (ml/g)	⩾0.4
Specific Space Area (m^2/g)	⩾300
Bulk Density (g/ml)	0.7±0.02
Average Crush Strength (N/cm)	⩾130
Attrition, %(m/m)	⩽1.0

Sulfur Recovery Catalysts

EJ-658

Product Applications

EJ-658 de-oxygen protection catalyst for sulphur recovery was prepared through using special-purpose active Al_2O_3 as carrier and adding patented auxiliary agent,which possesses dual function of Claus activity and de-oxygen protection.

Physical Properties

Size (mm)	φ4-6
Al_2O_3 %（m/m）	⩾80
Pore volume (ml/g)	⩾0.30
Specific Space Area (m^2/g)	⩾260
Bulk Density (g/ml)	0.70-0.90
Average Crush Strength (N/cm)	⩾120
Attrition, %(m/m)	⩽1.0

Sulfur Recovery Catalysts

EJ-688

Product Applications

EJ-688 is of sulphur recovery whose main active component is TiO_2.

Physical Properties

TiO_2	⩾85%
Size (mm)	φ4-6
Specific surface area (m^2/g)	⩾100
Pore volume (ml/g)	⩾0.20
Average crushing strength (N/cm)	⩾80
Bulk density (Kg/L)	0.95-1.05
Attrition , %(m/m)	⩽1.0

Sulfur Recovery Catalysts

EJ-699

Product Applications

EJ-699-catalyst uses modified active Al_2O_3 as carrier and possesses the advantages of well-distributed active components, rational pore distribution and low bulk density and so on.

Physical Properties

Size (mm)	φ3-6 or φ3 x (5-15)
Average crushing strength, N/cm (N/cm)	⩾120
Bulk density (kg/L)	0.5-0.85
Specific space area (m^2/g)	⩾200
Pole volume, (ml/g)	⩾0.35
Attrition, %(m/m)	⩽1.0

Mercury Removal Adsorbents

EJ-700

Product Applications

EJ-700 mercury remover uses grain activated alumina as the carrier possessing high strength, large pore volume , special pore structure.Due to loading special chemical activity components on the activated alumina, the effect of removing mercury is greatly increased.

Physical Properties

Size (mm)	ϕ (3~5)
Bulk Density (kg/l)	0.60~0.80
Average Crush Strength (N/cm)	⩾60
Specific Surface Area (m^2/g)	⩾200
Efficiency of removing mercury	⩾95%

Mercury Removal Adsorbents

EJ-701

Product Applications

EJ-701 mercury remover uses grain activated carbon as the carrier possessing high strength, large pore volume , special pore structure. Due to loading special chemical activity components to modification of the activated carbon, the effect of removing mercury is greatly increased.

Physical Properties

Size (mm)	φ3~5x5~15
Bulk Density (kg/l)	0.60~0.80
Average Crush Strength (N/cm)	⩾60
Specific Surface Area (m^2/g)	⩾1000
Efficiency of removing mercury	⩾95%