

***J-CHEM 145*****CL-GUARD CATALYST**

A high activity absorbent catalyst for feed purification  
such as H<sub>2</sub>-N<sub>2</sub> mixture, synthesis gas and Naphtha etc.

**TYPICAL CHEMICAL AND PHYSICAL PROPERTIES****A. CATALYST DESCRIPTION**

Designation	<b><i>J-CHEM 145</i></b>
Form	Grey-white extrudate
Size	Ø5×5-20mm

**B. TYPICAL CHEMICAL COMPOSITION (%wt)**

Calcium oxide	>35
Zinc oxide	>10
Aluminium Oxide	>30

**C. PHYSICAL PROPERTIES**

Bulk density	0.7-0.8 Kg/L
Surface area	>35 m <sup>2</sup> /g
Crush strength	>7 Kg
Pore volume	>0.3 ml/g
Breakthrough Cl capacity	>30%

**D. OPERATING CONDITIONS:**

Bed height/diameter	>4
Pressure:	atmosphere~5.0Mpa
Space velocity:	≤3000 h <sup>-1</sup>
Steam gas ratio:	≥0.4
Inlet Cl content	≤200 ppm
Outlet Cl content	≤0.1 ppm

**J-CHEM 147-1****CL-GUARD CATALYST**

A high activity absorbent catalyst for feed purification such as H<sub>2</sub>, N<sub>2</sub>, synthesis gas, CCR process' by-product hydrogen and refinery gas at ambient and low-temp. Cl content of outlet will be less than 0.1PPM

**TYPICAL CHEMICAL AND PHYSICAL PROPERTIES****B. CATALYST DESCRIPTION**

Designation	<b>J-CHEM 147-1</b>
Form	Grey-white extrudate
Size	Ø3×5-15mm

**B. PHYSICAL PROPERTIES**

Bulk density	0.6-0.8 Kg/L
Surface area	>35 m <sup>2</sup> /g
Crush strength	>60 N
Breakthrough Cl capacity	>25%

**C. OPERATING CONDITIONS:**

Pressure:	atmosphere~5.0Mpa
Temperature:	-4~60 °C
Space velocity:	500~3000 h <sup>-1</sup>
Inlet Cl content	1 ~1000ppm
Outlet Cl content	≤0.1 ppm

**D. SALES RECORD**

**J-CHEM 147-1** has been widely used in catalytic reforming process in many big refineries in Sinopec group throughout China, such as Shanghai, Manming, Dalian and Dagang. It was also proved to have good performance by Taiwan clients.



***J-CHEM 192***  
**CL-GUARD CATALYST**

A high activity adsorbent catalyst for feed purification of HCl.

Cl content of outlet will be less than 0.1PPM

**TYPICAL CHEMICAL AND PHYSICAL PROPERTIES**

**C. CATALYST DESCRIPTION**

Designation	<b><i>J-CHEM</i> 192</b>
Form	Spheres
Size	Ø3-5mm

**B. CHEMICAL COMPOSITION (wt%)**

Na <sub>2</sub> O	>6
Al <sub>2</sub> O <sub>3</sub>	balance

**C. PHYSICAL PROPERTIES**

Bulk density	0.75 ± 0.05 Kg/L
Surface area	>170 m <sup>2</sup> /g
Crush strength	>50 N

**D. OPERATING CONDITIONS:**

Pressure:	atmosphere~3.4Mpa
Temperature:	~400 °C
Space velocity:	500~5000 h <sup>-1</sup>
Inlet Cl content	1 ~1000ppm
Outlet Cl content	≤0.1 ppm