# HYGB500A CATALYST



## DESCRIPTION

*HYGB500A* is manufactured for reforming and cracking methanol and steam to create hydrogen ( $H_2$ ). This product has a high single-pass conversion rate, can offer lower reaction temperatures, save and extend oil life, while maintaining a high strength and good water resistance.

### REACTIONS

$CH_3OH + H_2O = CO_2 + 3H_2$	+49.5kj/mol
$CH_3OH = CO + 2H_2$	+90.7kj/mol
$CO + H_2O = CO_2 + H_2$	+41.19 kj/mol
$2CH_3 = CH_3OCH_3 + H_2O$	-24.9kj/mol
$CO + 3H_2 = CH_4 + H_2O$	-206.3kj/mol

#### **SPECIFICATIONS**

Molecular Sieve		
HYGB500A		Pellets
Property	Unit	Black Pellets
Diameter	mm	Φ 5 x 4-6mm; Φ 5 x 2.5-3.5mm
Bulk Density	g/mL (Ib/ft <sup>3</sup> )	1.30 ±0.05 (81.16 ±3.12)
Crush Strength	N/cm	≥200
<b>Operation Space</b>	h <sup>-1</sup>	≤1.2
<b>Operation Pressure</b>	MPa	≤5
<b>Operation Temperature</b>	°C	220 - 290
S in Feed Gas	ppm	≤0.1
CI in Feed Gas	ppm	≤1
Packaging Options	Super	Sack options available; 210L / Drum; 50L / Plastic Drum

#### **INDUSTRIES USED**

hydrogen production

steam methane reforming

#### **STORAGE**

This product should not be left exposed to open air and should be stored in dry conditions with air-proof packaging.



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