

COA of Butane dehydrogenation catalyst

Butane dehydrogenation catalyst is a newly developed high efficient catalyst used for isobutane dehydrogenation to produce isobutene. The isobutane conversion and isobutene selectivity can reach a high index in moderate conditions.

The main physical and chemical properties and the performance of reaction are shown in the table 1 and table 2.

Physical and Chemical Properties

Item		Index
Pt	m%	0.6±0.1
Cl	m%	2.0±0.5
Pore volume	ml/g	0.4~0.6
Surface area	m ² /g	170~210
Appearance		Sphere
Size	mm	Φ1.59(1/16inch)
Bulk density	g/cm ³	0.55~0.65
Crushing strength	N/particle	≤30

Process condition

Raw material		Isobutane
Space velocity	hr ⁻¹	1.5~3.0
Pressure	Mpa	0.04~0.1 (0.4~1.0 Bar)
Temperature	°C	590~650
Isobutane conversion	%	45~60
Isobutene selectivity	%	91~96
Isbutene yield	%	≤44.5

