

AMBERLYST™ 70 High Temperature Strongly Acidic Catalyst

Description

AMBERLYST 70 is a new macroporous polymer catalyst designed for use in high-temperature heterogenous catalysis. It is particularly well suited for processes such as olefin hydration, esterification and aromatic alkylation.

In these applications, AMBERLYST 70 offers definite advantages over conventional resins:

- Higher thermal stability,
- High catalytic activity, especially at higher flow rate conditions,
- Very low chloride leaching.

Typical Properties

These properties are typical but do not constitute specifications.

Physical form	Dark brown, spherical beads
Ionic form as shipped	Hydrogen (98%)
Concentration of acid sites	≥ 0.9 eq/L ≥ 2.55 eq/kg
Moisture holding capacity	53-59% (H ⁺ form)
Shipping weight	770 g/L (48.0 lbs/ft ³)
Particle size	
Effective size	0.50 mm
Uniformity coefficient	≤ 1.5
Fines content	< 0.425 mm: 0.5% max
Nitrogen BET	
Surface area	36m ² /g
Average pore diameter	220 Å

Suggested Operating Conditions

Maximum operating temperature	190°C (375°F)
Minimum bed depth	60 cm (24 inches)
Operating flow rate	1 to 8 BV*/h (LHSV)
Pressure drop limitation	3 bar (45 psig) across the bed

* 1 BV = 1 m³ solution per m³ of resin

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LENNTECH

info@lennotech.com Tel. +31-152-610-900

www.lennotech.com Fax. +31-152-616-289