



AMBERLYST® 15WET

Industrial Grade Strongly Acidic Catalyst

PRODUCT DATA SHEET

AMBERLYST 15WET is a macroreticular, strongly acidic, polymeric catalyst. Its continuous open pore structure makes it an excellent heterogeneous acid catalyst for a wide variety of organic reactions. AMBERLYST 15WET catalysts' polymeric structure is extremely resistant to breakdown by osmotic, mechanical and thermal shock. It also possesses greater resistance to oxidants such as chloride, oxygen and chromates than most other polymeric catalysts. AMBERLYST 15WET can be used directly in aqueous systems or in organic media after conditioning with a water miscible

solvent. AMBERLYST 15WET has the optimal balance of surface area, acid capacity and pore diameter to make it the catalyst of choice for etherification (MTBE, ETBE, TAME), esterification and hydration reactions. AMBERLYST 15WET can also be used for chemical processing applications to remove impurities (metal ions) and basic organic compounds (amines, etc.) from aqueous and non aqueous environments (appropriate pretreatment required).

PROPERTIES

Physical form _____	Opaque beads
Ionic form as shipped _____	Hydrogen
Total exchange capacity ^[1] _____	≥ 1.7 eq/L
	≥ 4.7 eq/kg
Moisture holding capacity ^[1] _____	52 to 57 % (H ⁺ form)
Shipping weight _____	770 g/L
Particle size _____	
Uniformity coefficient _____	≤ 1.70
Harmonic mean size _____	600 to 850 μm
Fine contents ^[1] _____	< 0.355 mm : 1.0 % max
Coarse beads _____	> 1.180 mm : 5.0 % max
Average pore diameter _____	24 nm
Surface area _____	45 m ² /g
Shrinkage _____	Water to methanol : 4 %
	Water to MTBE : 12 %

^[1] Contractual value

Test methods are available on request.

SUGGESTED OPERATING CONDITIONS

Maximum operating temperature _____	120°C
Minimum bed depth _____	1000 mm
Operating flow rate _____	1 to 5 LHSV*
Pressure drop limitation _____	1 bar across the bed

* LHSV = Liquid Hourly Space Velocity for liquid density at 25°C

All our products are produced in ISO 9002 certified manufacturing facilities.

