



AMBERLYST™ 35DRY

Industrial Grade Strongly Acidic Catalyst

Introduction

AMBERLYST 35DRY is a bead form, strongly acidic ion exchange resin developed particularly for heterogeneous acid catalysis of a wide variety of organic reactions. It is also useful in non aqueous ion exchange systems for the removal of cationic impurities.

The macroreticular pore structure of AMBERLYST 35DRY permits ready access of liquid or gaseous reactants to the hydrogen ion sites located throughout the bead, thus ensuring successful performance even in non swelling organic media.

The minimal water content of AMBERLYST 35DRY makes it excellent for use in non-aqueous systems where the presence of water will have a negative effect on catalytic activity. Also the higher thermal limit and higher dry weight capacity of AMBERLYST 35DRY make it the catalyst of choice for phenol alkylation, esterification, etherification, and condensation hydrolysis.

Properties

Physical form	Opaque beads
Ionic form as shipped	Hydrogen
Concentration of acid sites	≥ 5.0 eq/kg
Water content	≤ 3% (H ⁺ form)
Shipping weight	560 g/L (35 lbs/ft ³)
Particle size	
Fines content	< 0.300 mm: 1.0% max
Coarse beads	> 1.180 mm: 5.0% max
Nitrogen BET	0.550 to 0.700 mm
Surface area	50 m ² /g
Average pore diameter	300 Å
Total pore volume	0.35 cc/g
Swelling	Dry to phenol: 27%

Suggested Operating Conditions

Maximum operating temperature	150°C (300°F) in non aqueous media
Minimum bed depth	600 mm (24 inches)
Operating flow rate	1 to 5 BV*/h (LHSV)
Pressure drop limitation	1 bar (15 psig) across the bed

For more information about DOW™ resins, call the Dow Water & Process Solutions business:

North America: 1-800-447-4369
 Latin America: (+55) 11-5188-9222
 Europe: +800-3-694-6367
 Italy: +800-783-825
 South Africa: +0800 99 5078
 Pacific: +8007776 7776
 China: +400 889-0789

<http://www.dowwaterandprocess.com>

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