

**AMBERLYST™ 131WET**

Industrial Grade Strongly Acidic Catalyst

Introduction

AMBERLYST 131WET is an improved solid acid polymeric catalyst* with a uniform particle size. AMBERLYST 131WET is highly active for condensation reactions such as the condensation of phenol with acetone to produce Bisphenol-A.

This catalyst is specially designed to produce BPA of unsurpassed color and purity.

AMBERLYST 131WET's particle size and pore structure allow for reduced reactor pressure drop and significantly higher productivity than conventional ion exchange resin catalysts.

Properties

Physical form	Light brown spherical beads
Ionic form as shipped	Hydrogen
Concentration of acid sites	≥ 4.8 eq/kg ^[1] ≥ 1.35 eq/L
Moisture holding capacity	62 to 68% (H ⁺ form)
Shipping weight	740 g/L (46 lbs/ft ³)
Particle size	
Harmonic mean size	0.700 - 0.800 mm
Uniformity coefficient	≤ 1.15
Fines contents	< 0.425 mm: 0.5% max
Coarse beads	> 1.180 mm: 2.0% max
Shrinkage	Water to phenol: 48%

Suggested Operating Conditions

Maximum operating temperature	130°C (265 °F)
Minimum bed depth	60 cm (24 inches)
Operating flow rate	1 to 5 BV*/h (LHSV)
Pressure drop limitation	1 bar (15 psig) across the bed

Hydraulic Characteristics

Figure 1 shows the bed expansion of AMBERLYST 131WET as a function of backwash flow rate and water temperature.

Figure 2 shows the pressure drop data for AMBERLYST 131WET as a function of service flow rate and water temperature.

Figure 1: Bed expansion

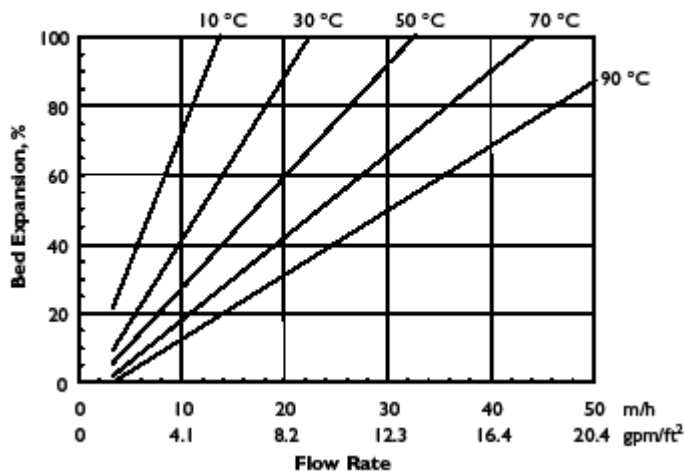
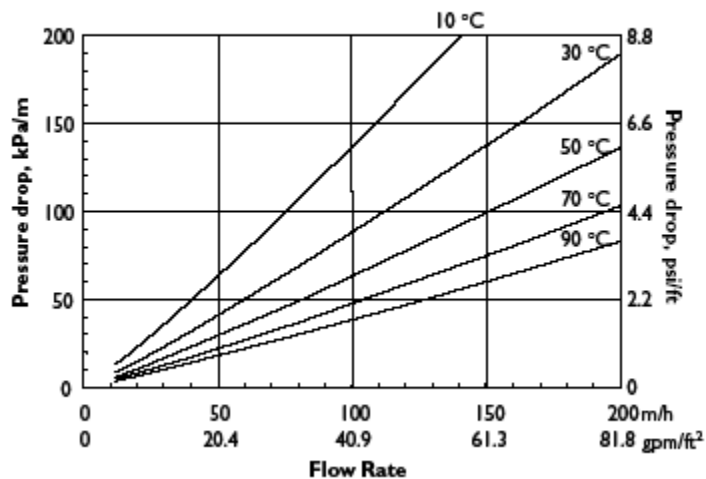


Figure 2: Pressure drop



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