

AMBERLYST™ 31WET Industrial Grade Strongly Acidic Catalyst

Description

AMBERLYST 31WET is a bead form, gel type, sulphonic acid polymeric catalyst. AMBERLYST 31WET may be used in numerous processes like Bisphenol-A reaction or also for esterification reactions (acrylates production).

Typical Properties

These properties are typical but do not constitute specifications.

Physical form	Amber spherical beads
Ionic form as shipped	Hydrogen
Concentration of acid sites ^[1]	≥ 1.35 eq/L ≥ 4.8 eq/kg
Moisture holding capacity ^[1]	63 to 67% (H ⁺ form)
Shipping weight	770 g/L (48 lbs/ft ³)
Particle size	
Harmonic mean size	0.550 to 0.700 mm
Uniformity coefficient	≤ 1.60
Fines content ^[1]	< 0.425 mm: 0.8% max
Coarse beads	> 1.180 mm: 2.0% max
Shrinkage	Water to phenol: 47%

^[1] Contractual value

Test methods are available on request.

Suggested Operating Conditions

Maximum operating temperature	130°C (265°F) in non aqueous media 80°C (175°F) in aqueous media
Minimum bed depth	1000 mm (39 inches)
Operating flow rate	1 to 5 BV*/h (LHSV)
Pressure drop limitation	1 bar (15 psig) across the bed

* 1 BV = 1 m³ solution per m³ of resin

Hydraulic Characteristics

Figure 1 shows the bed expansion of AMBERLYST 31WET as a function of backwash flow rate and water temperature.

Figure 1: Bed expansion

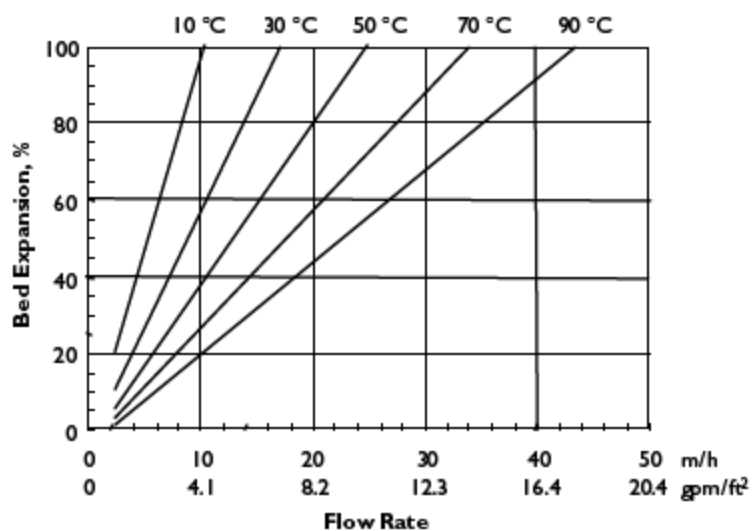
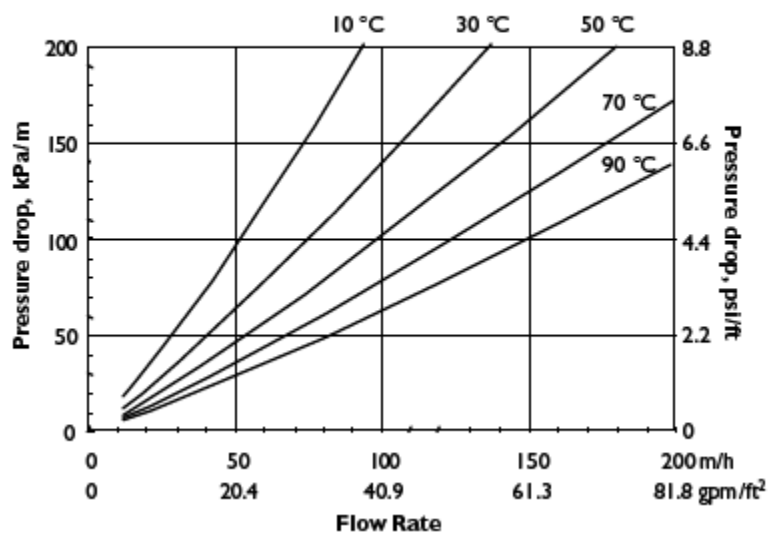


Figure 2 shows the pressure drop data for AMBERLYST 31WET as a function of service flow rate and water temperature.

Figure 2: Pressure drop



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

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LENNTECH

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

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