Xtimate® XB-SCX
Care and Use Manual

Xtimate XB-SCX column uses sulfonic group bonded silica, with better stability and tolerance. It applies to the detection of metformin HCL and its preparations and helps improve efficiency and performance.

Column parameters

Bonded phase	Sulfonic group
USP listing	L9
Particle size	5μm
Pore size	120Å
Specific surface area	300m^2/g
Carbon loading	2%
End-capping	No End-capping
pH stability	2.0-8.0
Max. Temperature	60℃
Max. Pressure	40MPa

Activation and Transition

Storage Solvent: n-hexane/isopropanol

	Activation	Transition
Column	4.6×250mm, 5μm	
Flow rate	0.5ml/min	1ml/min
Mobile phase	90% methanol	5% methanol
Time	5h	1h
Temperature	30℃	Analysis temperature

Column Daily Flushing

Flow rate	Analysis flow rate
Mobile Phase	10% methanol
Time	60min
Storage	Store in 10% methanol, kept in 4 ℃ refrigerator.

Regeneration Flushing

In circumstances of high column pressure, abnormal peak shape, low column efficiency or low resolution etc., regenerate column as following:

Flow Rate	Analysis flow rate
Mobile Phase	Water -100 mmol/L $NaClO_4$ (adjust pH to 3 with phosphate) -water -10% methanol
Temperature	30℃
Time	80min each step

Notes:

1. Ion-exchange column required long equilibrium time. Overnight column equilibrium is suggested after activation, using analysis mobile phase, flow rate 0.2 ml/min.
2. In detection of related compounds, impurities shall be separated despite of the wide peaks due to high-concentration sample solutions.
3. Poor separation of excipients and impurities may occur when detecting preparations due to different excipients used.
4. Let the column at ambient temperature before switching to instrument.

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