SFC SCREENING STRATEGY – COATED POLYSACCHARIDES

SAMPLE NATURE?

Choose Mobile Phase Additive

- CO₂ / MeOH 80/20
  - k₂ ≤ 1.5
    - Increase % CO₂
  - k₂ > 1.5
    - Decrease % CO₂
  - Baseline Resolution
    - Try Secondary Screening

- CO₂ / EtOH 80/20
  - 1.5 ≤ k₂ ≤ 15
    - No or Partial Resolution

- CO₂ / 2-PrOH 80/20

- CO₂ / ACN 70/30

METHOD DELIVERY

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HPLC SCREENING STRATEGY – COATED POLYSACCHARIDES
(ORGANIC SOLVENTS)

SAMPLE NATURE?

Choose Mobile Phase Additive

Alkane / 2-PrOH 80/20
  - Increase % Alkane
  - No or Partial Resolution
  - Other Solvents Other Columns

Alkane / EtOH 80/20
  - 1 < k₂ < 10
  - Baseline Resolution

k₂ > 10
  - Decrease % Alkane
  - Other Solvents Other Columns

ACN / Alcohol 100/0
  - k₂ < 10
  - No or Partial Resolution
  - Switch to MeOH or EtOH or Their Mixtures

k₂ > 10
  - Baseline Resolution
  - Add or Increase Alcohol
  - Change the Alcohol
  - No or Partial Resolution
  - Other Solvents Other Columns

METHOD DELIVERY
HPLC SCREENING STRATEGY – COATED POLYSACCHARIDES
(WATER COMPATIBLE SOLVENTS)

Acidic Compounds

Aqueous Solution pH 2 (HCOOH)
+ 40% ACN
or 60% MeOH

Neutral Compounds

Water
+ 40% ACN
or 60% MeOH

Basic Compounds

Aqueous Solution pH 9 (20 mM NH₄HCO₃)
+ 40% ACN
or 60% MeOH

k₂ < 1
Decrease % Organic Solvent

1 < k₂ < 10
No or Partial Resolution

k₂ > 10
Increase % Organic Solvent

Baseline Resolution

Other Solvents Other Additives Other Columns

METHOD DELIVERY

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