

# Application Data

No. 1015A

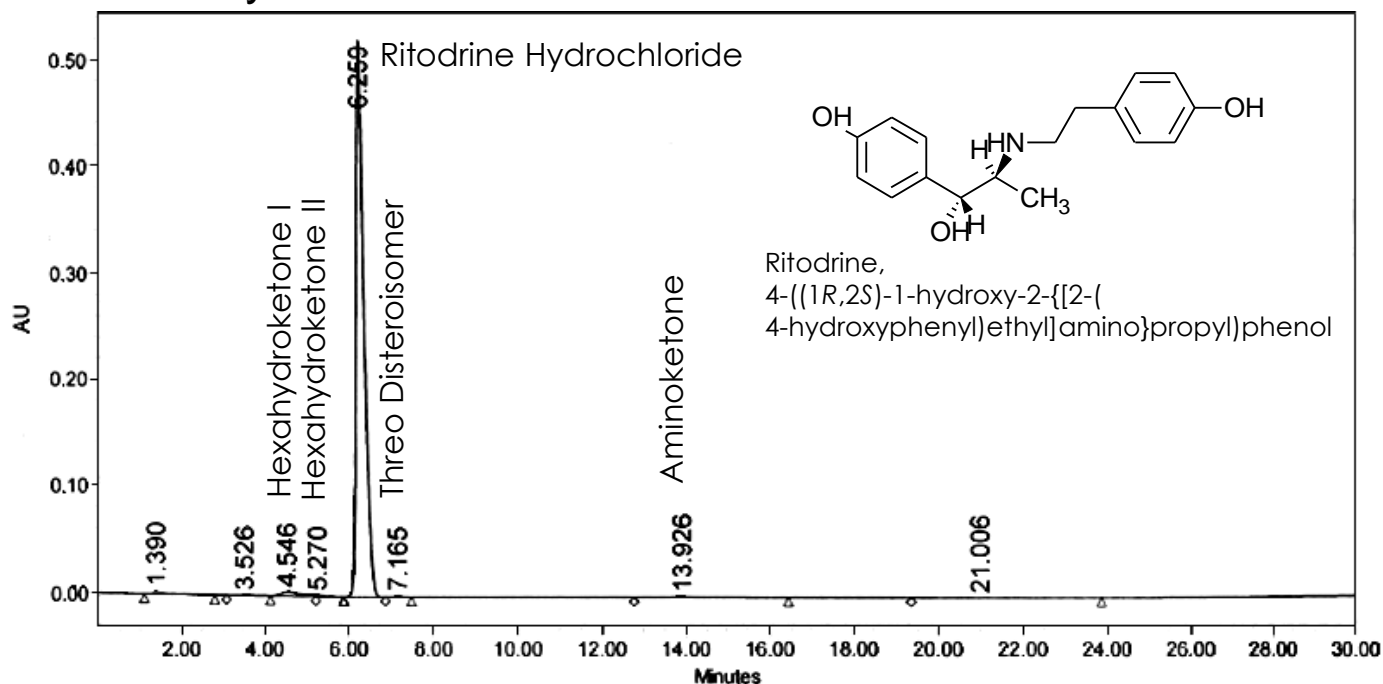
ChromaNik  
ChromaNik Technologies Inc.

塩酸リトドリン

British Pharmacopoeia 2009 Related substances Test

## Ritodrine Hydrochloride

Sunniest C8, 5 µm 250 x 4.6 mm i.d.



Column: Sunniest C8, 5 µm 250 x 4.6 mm

Mobile phase:

Solution A: 6.6 g Diammonium Hydrogen Orthophosphate + 1.1 g Sodium Heptane sulphonate dissolved in 700 mL water and adjust the pH to 3.0 with 85% orthophosphoric acid

Solvent B, Methanol 300mL

Mix Mobile phase solution A and B

Flow rate: 2.0 mL/min

Temperature: ambient room temperature

Detection: UV 214 nm

Test probe : 0.10 % w/v Ritodrine Hydrochloride in Mobile phase

Injection volume: 20 µL

### System suitability requirements

Relative retention with respect to Ritodrine

Impurity Tyramine RRT 0.3

Impurity Hexahydroketone II RRT 0.65

Impurity Hexahydroketone I RRT 0.85

Impurity Threo Disteroisomer RRT 1.15

Impurity Aminoketone RRT 2.3

Resolution between Threo Disteroisomer and Ritodrine

Hydrochloride not less than 1.5

### Observations

- Sunniest C8 column offers resolution of 2.8 between Threo Disteroisomer and Ritodrine.
- Sunniest C 8 column offers RRT and resolution within the prescribed Pharmacopoeal requirements.