<u>Application</u> NWA E K P R

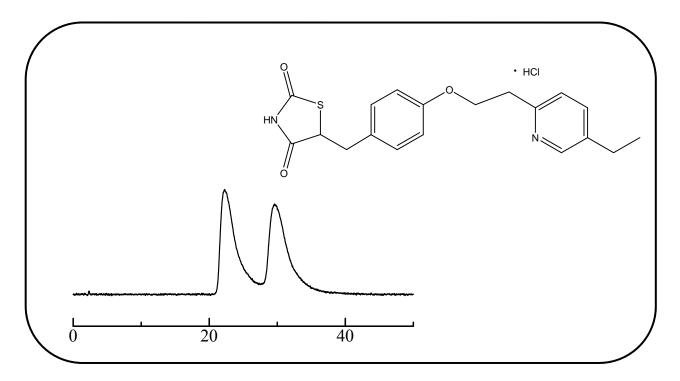
2013 August

V O L. 13

Analysis of pioglitazone hydrochloride using the ULTRON ES-OVM

Shown below is a reversed-phase analysis of the globally available oral hypoglycemic drug "pioglitazone hydrochloride", which belongs to the thiazolidine (TZD) family of compounds, performed using the ULTRON ES-OVM.

Pioglitazone hydrochloride (oral hypoglycemic)



Column: ULTRON ES-OVM (5 μm) Column temp.: 25°C UV-269 nm Column size: 150 mm L x 4.6 mm I.D. Detection:

Mobile phase: 20 mM KH₂PO₄ (pH 4.6)/C₂H₅OH Sample: Pioglitazone hydrochloride 200 mg/L =95/5

(in methanol)

Flow rate: 1.0 mL/min Injection vol.:

• Features of the ULTRON ES-OVM

- 1. Designed specifically for separations of chiral compounds.
- 2. Employs a highly denaturation resistant protein (ovomucoid) ligand.
- 3. Displays a wide range of chiral recognition.
- 4. No sample pretreatment required for chiral separations.
- 5. Can be used for reversed-phase analyses.
- 6. Trace analyses possible (several nanograms).



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■ Analytical column specifications

Product name	Particle size (µm)	Column dimensions Length × I.D. (mm)
ULTRON ES-OVM	5	150 × 2.0
ULTRON ES-OVM	5	150 × 4.6
ULTRON ES-OVM	5	150 × 6.0
ULTRON ES-OVM-C	5	150 × 4.6
ULTRON ES-OVM	10	250 × 4.6
ULTRON ES-OVM Prep (preparative)	10	250 × 20.0

■ Guard column specifications ■

Product name	Particle size (µm)	Column dimensions Length × I.D. (mm)
ULTRON ES-OVM.G	5	10 × 4.0
ULTRON ES-OVM Prep.G (preparative guard column)	10	15 × 8.0
ULTRON ES-OVM (guard cartridges (x 2)	5	5 × 2.0
Guard cartridge holder (with adaptor)	For 5 × 2.0 mm columns	
ULTRON ES-OVM (guard cartridges (x 2))	5	10 × 4.6
Guard cartridge holder (with adaptor)	For 10 × 4.6 mm columns	

Protecting columns using guard columns

By using guard columns together with analytical columns, analytical columns can be protected from contamination, enabling longer column lifetimes. The use of guard columns is particularly recommended when analyzing samples containing large amounts of impurities.

Guard cartridges are also available when guard columns are changed frequently.

Please use guard columns with the same or smaller inner diameter than that of the analytical column being used.

ULTRON ES-OVM-C (new product)

Clopidogrel bisulfate evaluation conditions based on USP standards employed for shipping inspections.

(Performance reports included with columns.)

Please feel free to contact us with questions related to analyses. Demonstration columns are also available.

Please be aware that specifications and prices are subject to change without prior notification due to the implementation of improvements.