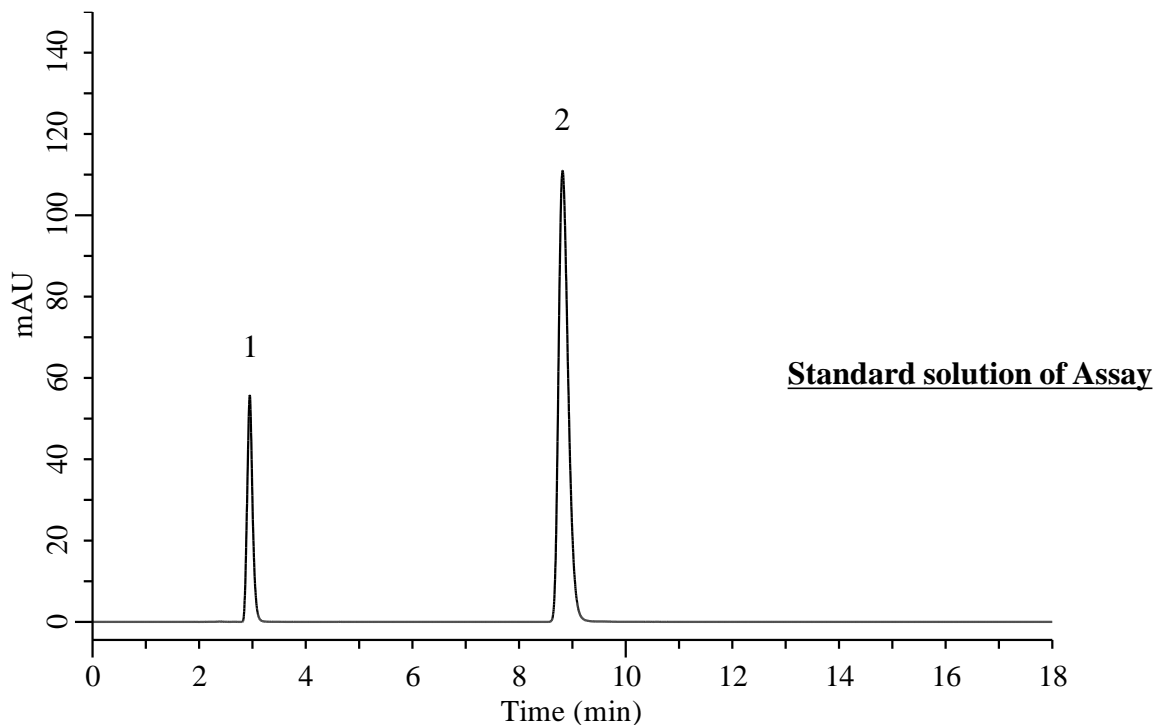


## Analysis of Paracetamol and Mefenamic acid

(Under the Condition of the draft for the Indian Pharmacopoeia, Mefenamic acid and Paracetamol Tablets)



### Conditions

**System** : Chromaster HPLC system (HITACHI)  
**Column** : Inertsil ODS-3 (GL Sciences Inc.)  
 (5  $\mu$  m, 250 x 4.6 mm I.D.)  
**Column Cat. No.** : 5020-01732  
**Eluent** : A) CH<sub>3</sub>CN  
 B) CH<sub>3</sub>OH  
 C) Buffer\*  
 A/B/C = 40/10/50, v/v/v  
**Flow Rate** : 1.0 mL/min  
**Col. Temp.** : 25 °C  
**Detection** : UV 285 nm  
**Injection Vol.** : 10  $\mu$  L  
**Sample** : Standard

### Analyte:

1. Paracetamol 0.05 mg/mL  
 2. Mefenamic acid 0.05 mg/mL

### Number of theoretical plates

peak area of 1 : 3,843 ( $\geq 1500$ )  
 peak area of 2 : 10,983 ( $\geq 1500$ )

### Tailing factor

peak area of 1 : 1.17 ( $\leq 2.0$ )  
 peak area of 2 : 1.34 ( $\leq 2.0$ )

### RSD of the

peak area (%) (n=6) (1) : 0.06 ( $\leq 2.0$ )  
 peak area (%) (n=6) (2) : 0.13 ( $\leq 2.0$ )

\* Dissolve 8.37g of potassium dihydrogen orthophosphate and 6.71g of dipotassium hydrogen orthophosphate in 1000 ml of water, adjusted to pH 6.5 with dilute orthophosphoric acid.