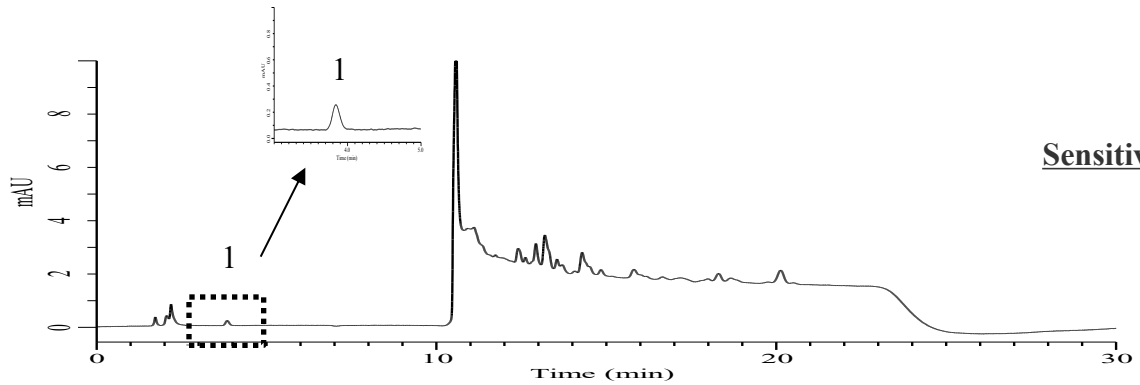
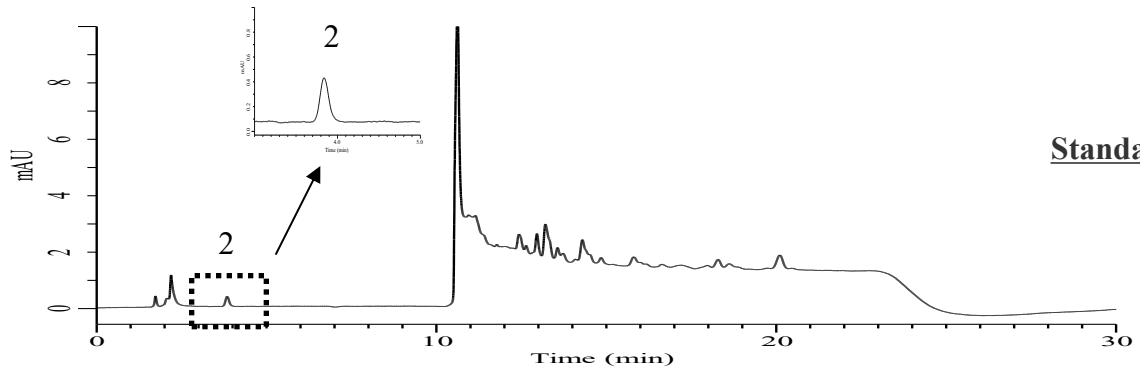
# Analysis of Phenylhydrazine

**(Under the Condition of draft for USP PF52(5), Edaravone, LIMIT OF PHENYLHYDRAZINE)**




**Sensitivity solution**




**Standard solution**

## Conditions

**System** : Primaide (HITACHI)
**Column** : InertSustainSwift C18 (GL Sciences Inc.)
(5 µm, 150 x 4.6 mm I.D.)
**Column Cat. No.** : 5020-88026
**Eluent** : A) $CH_3CN$/Buffer* = 60/40, v/v
B) $CH_3CN$/Buffer* = 10/90, v/v

| Time (min) | A (vol %) | B (vol %) |
|---|---|---|
| 0.0 | 0 | 100 |
| 7.0 | 0 | 100 |
| 7.1 | 100 | 0 |
| 20.0 | 100 | 0 |
| 21.0 | 0 | 100 |
| 30.0 | 0 | 100 |

**Flow Rate** : 1.0 mL/min
**Autosampler** : 5 ℃
**Col. Temp.** : 40 ℃
**Detection** : UV 225 nm (Primaide 1410 UV)
**Injection Vol.** : 10 µL
**Sample** : Standard in $CH_3CN$/1N HCl = 30/70, v/v

**Analyte:**

1. Phenylhydrazine 0.067 µg/mL
2. Phenylhydrazine 0.134 µg/mL

Signal-to-noise ratio : 14.6 (≧ 10)

RSD of
the peak area (%)(n=6) : 2.68 (≦ 5.0)

*: Dissolve 7.0 g of sodium perchlorate in 1000 mL of water. Adjust with perchloric acid to a pH of 2.5.