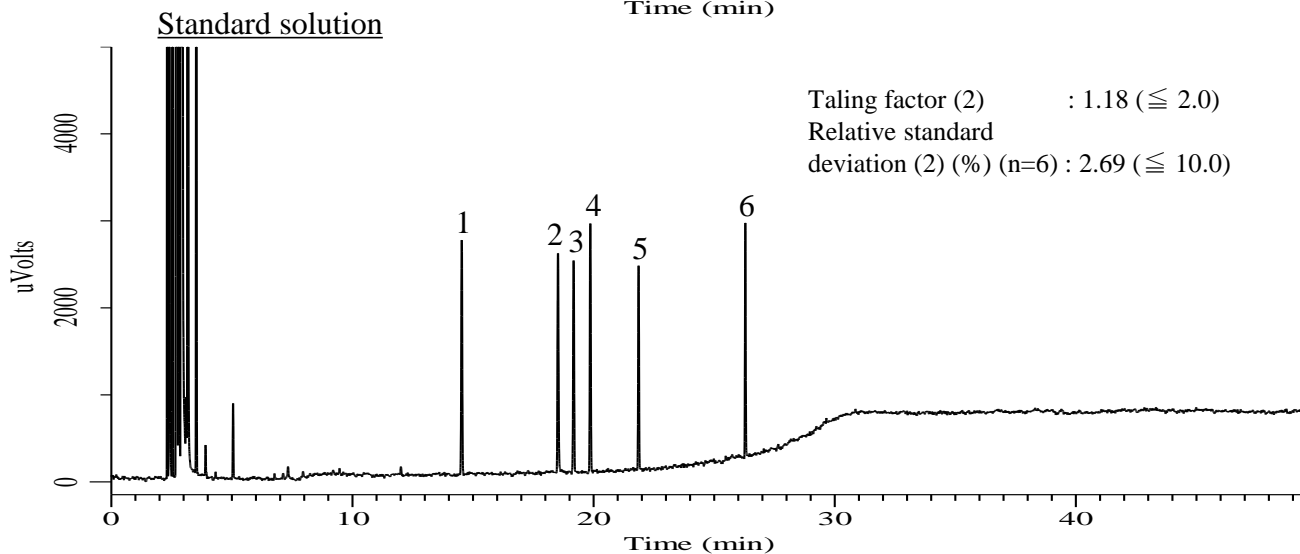
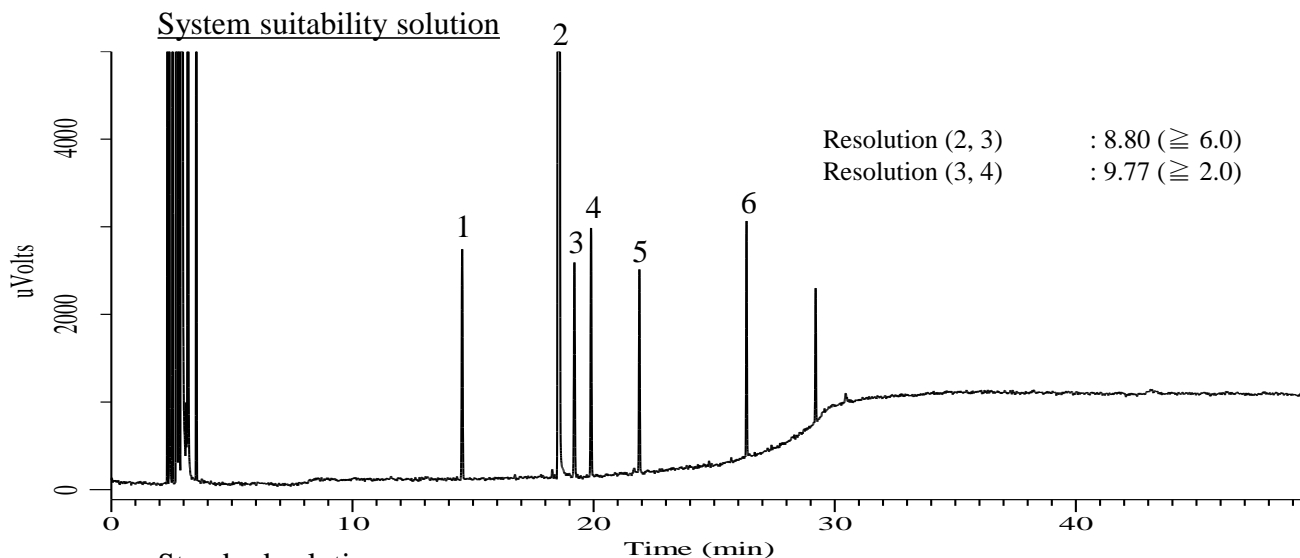


# Memantine Hydrochloride

(Under the Condition of United States Pharmacopeia 39, Organic Impurities)



## Conditions

**System** : GC-4000 Plus-FID  
**Column** : InertCap 5  
 0.32 mm I.D. x 50 m df = 0.52  $\mu$ m  
**Col. Cat. No.** : 1010-18292  
**Col. Temp.** : 50  $^{\circ}$ C - 5  $^{\circ}$ C/min - 145 $^{\circ}$ C  
 - 10 $^{\circ}$ C/min - 250 $^{\circ}$ C (20 min)  
**Carrier Gas** : He 4.0 mL/min  
**Injection** : Split 1:50  
 220  $^{\circ}$ C  
**Injection Vol.** : 1  $\mu$ L  
**Detection** : FID Auto Range  
 300  $^{\circ}$ C  
**Sample** : Standard

## Analyte

1. Memantine related compound A (1,3-Dimethyladamantane)
2. Memantine
3. Memantine related compound B (3,5-Dimethyladamantane-1-ol)
4. Memantine related compound C (1-Chloro-3,5-dimethyladamantane)
5. Memantine related compound D (1-Bromo-3,5-dimethyladamantane)
6. Memantine related compound E (N-3,5-Dimethyladamantan-1-yl formamide)