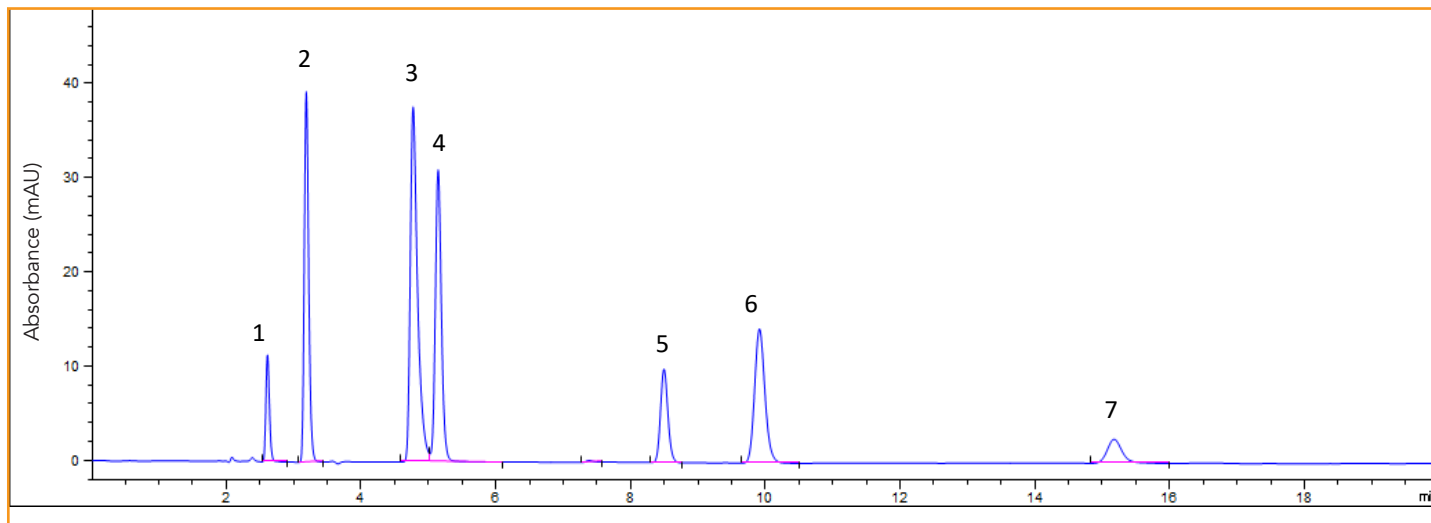




## Chloroquine Phosphate Assay and Impurity Profiling

252-P



### PEAK IDENTITIES

1. Phenol
2. Chloroquine related compound G (RCG)
3. Chloroquine related compound D (RCD)
4. Hydroxychloroquine sulfate
5. Chloroquine related compound A (RCA)
6. Chloroquine Phosphate
7. Chloroquine related compound E (RCE)

### TEST CONDITIONS:

**Column:** HALO 90 Å C18, 5 µm, 4.6 x 250 mm  
**Part Number:** 95814-902  
**Mobile Phase:** 70/30 Methanol/buffer/0.4% triethylamine  
 buffer: 1.4 g K<sub>2</sub>HPO<sub>4</sub> in 1000 mL, adjust to pH 3.0  
 using H<sub>3</sub>PO<sub>4</sub>

#### Isocratic

**Flow Rate:** 1 mL/min  
**Pressure:** 237 bar  
**Temperature:** 30 °C  
**Detection:** UV @ 260 nm  
**Injection Volume:** 20 µL  
**Sample Solvent:** mobile phase  
**Flow Cell:** 10 µL

Chloroquine Phosphate is in a class of drugs called antimalarials/amebiasis and is used to prevent and treat malaria. A quick and easy HPLC method is used for the chromatographic purity of Chloroquine Phosphate. These conditions follow the USP43-NF38 monograph methods for Chloroquine Phosphate Assay and Impurity Profiling with minor modifications in the sample concentration. The isocratic method shows excellent resolution and peak shape using a HALO® 5 µm C18 column. A 6.0 resolution value between chloroquine phosphate and chloroquine related compound A is well over the USP requirement. (> 2.0)

