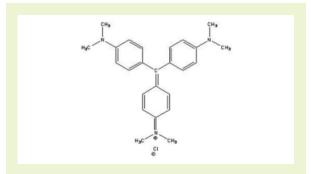
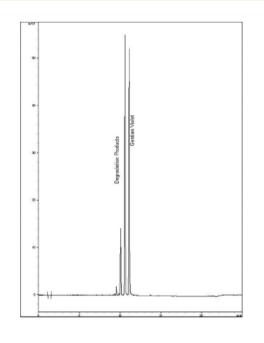


Separating Related Compounds

Gentian Violet and Degradation Products





Notes: Gentian Violet is an antifungal agent, staining agent (gram stain test), topical ointment for burns and for finger printing. This product does not require a prescription but is not easily found in most drug stores. Typically it is prepared as a weak solution (0.1%) in water and is painted on skin and gums to fight off fungal infections. Gentian Violet has many uses and is also known as Andergon, Anailine violet, Brilliant Violet 58, Meroxylan, Methyl Violet 10BNS, Vianin and others. Gentian Violet refers to is color and is not made from gentians.

Method Conditions

Column: Cogent HPS Cyano™, 5µm, 120Å

Catalog No.: 75025-15P

Dimensions: 4.6 x 150 mm

 $\textbf{Mobile Phase:} \ A: 10\% \ Acetonitrile/ \ 90\% \ 10mM \ NH_4H_2PO_4$

B: 70% Acetonitrile/ 30% 10mM NH₄H₂PO₄

Flow rate: 1.5 mL/min

 Gradient:
 time (min.)
 %B

 0
 0

 15
 100

Temperature: 25°C

Solubility: Water & Chloroform. Insoluble in either

Injection vol.: 20µL

Detection: UV 588 nm

Peaks: 1. Degradation Products

2. Gentian Violet

Discussion

Gentian Violet degrades in solution, forming complex set of degradation products. This method can easily separate out the various compounds formed in solution. The figure on the left shows a USP standard of Gentian Violet after stressing it in solution thus creating degradation products. With excellent selectivity as shown as well as great peak shape this method is robust and easy to perform.

The HPS Cyano column is very stable and produces very high efficiency in this method making it a great choice for analysis.