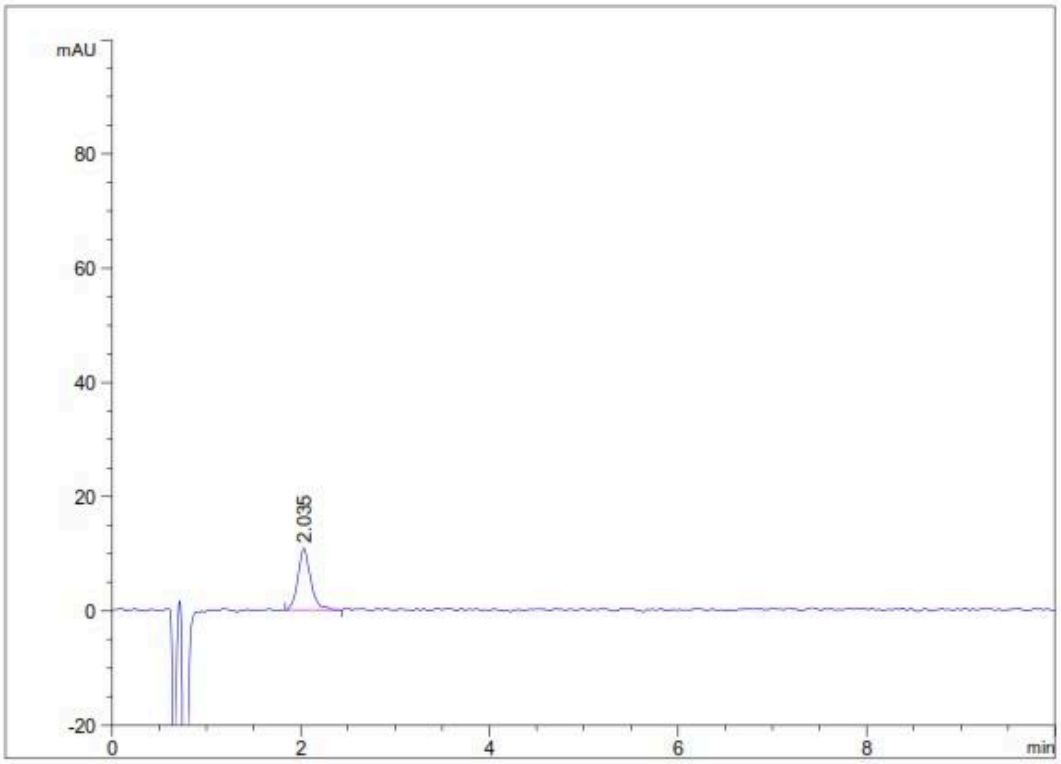
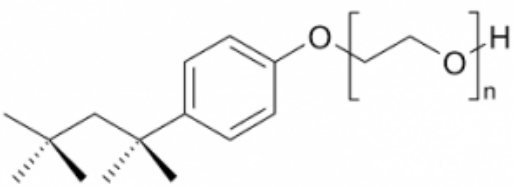
Triton X-100 Assay by HPLC For Cleaning Methods - AppNote

A Sensitive Assay for Detection of a Non-ionic Surfactant

Triton X-100 is used in the sample purification steps of various materials as well as for cleaning apparatus in pharmaceutical manufacturing. Due to the toxic nature of Triton X-100, a sensitive method for its detection and quantification is very important to identify any residual amounts.

This simple Isocratic Method may be used to verify residual amounts of this Surfactant have been removed from final material or from vital manufacturing equipment.





Peak:

Triton X-100

Met hod Conditions:

Column: Cogent Bidentate C18™, 4µm, 100Å
Catalog No.: 40018-75P
Dimensions: 4.6 x 75mm

Mobile Phase: 80:20 Acetonitrile / DI Water with 0.1% Formic Acid
Injection vol.: 5µL
Flow rate: 1.0mL / minute
Detection: UV @ 234nm

Sample Preparation: Triton X-100, 50ug / mL in DI Water

Note: *Triton X-100 is one of the most widely used nonionic surfactants for lysing cells to extract protein and other cellular organelles. Triton X-100 ($C_{14}H_{22}O(C_2H_4O)_n$) has a hydrophilic polyethylene oxide chain and an aromatic hydrocarbon lipophilic or hydrophobic group. The hydrocarbon group is a 4-phenyl group.*

This Method was developed by and is presented courtesy of [ARL- Eutech Scientific Services, Inc.]

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