

Approved by Director: Dr. Guy Vallaro

- A. Purpose:** Instructions for preparing the hydrocarbon performance check mix.
- B. Scope:** Preparation of the C9-C20 hydrocarbon performance check mix used to determine if the GC's and the GC/MS are "in control".
- C. Responsibility:** Chemistry section chemist or designee
- D. Analytical procedure:** As part of the QA/QC program, the instrumental performance check mix is prepared according to the following:
1. Individual n-alkanes are purchased at purity \geq 98% from an ISO certified vendor – Sigma-Aldrich
 2. A stock solution of C9-C20 n-alkanes is prepared gravimetrically at a concentration of approximately 5 mg/ml in hexane.
 3. The stock solution is diluted to a working concentration (as determined by the chemist), and is used in all performance checks.
 4. The solution is stored in the chemistry lab refrigerator.
- E. Documentation:** SOP FLCH 09
SOP FLCH 03