Cancer Imaging Program
National Cancer Institute

Master Compounding Record

Preparation of 95% 1 mM Formate in Water
HFM-_____

Component Name	Internal Tracking Number (ITN)	Desired Concentration (% = v/v)	x	Target Volume (mL)		Sample Calculated Amount (mL)
Methanol (HPLC grade)	**SS-MTH- _____**	**5 %**	**x**	**500**	**=**	**25**
Water (HPLC grade)	**SS-HGW- _____**	**95 %**	**x**		**=**	**475**
Formic Acid, (> 88%).	**SS-FMA-_____**	**1 mM**				**0.027**

Required Supplies and Equipment:

1. Graduated cylinders, 25 mL and 500 mL (to deliver)
2. Pipettor with pipet tips
3. Labels
4. Final Container(s) for Storage with appropriate Lid(s)

Guidelines:

- If a gradient HPLC pump system is used, then it is acceptable to make the formate solution without the methanol of step 2, below, and to add the formate solution and methanol into the pump through separate input lines. Program the pump to deliver a 95% 1 mM formate: 5% methanol (v:v) mobile phase.

PROCEDURE
1. **Make the 1 mM formate solution:** Rinse the 500 mL graduated cylinder with the HPLC grade water. Add 475 mL of HPLC grade water followed by 27 µL formic acid to the 500 mL graduated cylinder.
2. Add 25 mL of HPLC grade methanol to the methanol rinsed 25 mL graduated cylinder. Add the methanol to the aqueous formate from step 1 if the solutions are not mixed using the HPLC pump system.
3. Pour the mobile phase or formate solution into the final storage container, cap the container, and mix the contents thoroughly. Label the container with the compounding number, contents, date made, expiration and the initials of the person who made the solution. The solution expires 24 hours after it is made.

Performed By/Date: _____

Checked By/Date: _____

Author:_____**Date:**_____ .

Regulatory Approval: Date: .