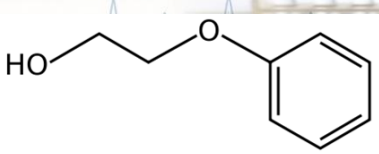
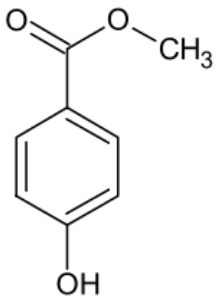


Phenoxy ethanol & Methyl paraben Analysis by PDA(Photodiode Array)



<Preconditioning for Sample>

A species of Skin toner or Lotion

sample 2-3g+
MeOH 10ml
Diffuse with shaking

↓

Mixed solution
/50ml MeOH
mass up
ultrasonic extraction
for 20min

→

supernatant extract
0.45um filtering
Use it as test sample

A species of Cream or Sunblock

sample 2-3g+
DMF 10ml
Diffuse with shaking
ultrasonic extraction
10min

↓

Mixed solution
/50ml MeOH
mass up
Ultrasonic extraction
20min

→

Supernatant extract
0.45um filtering
Use it as test sample

YL 9100 HPLC

Mobile phase : A-ultra pure water 0.1% Acetic acid, B-MeOH

Column Oven : 35°C
Detector : PDA (257nm)
Column : C18
(4.6*250mm, 5um)
Injection Volumn :
20ul sample loop

<Gradient Program>

Time(min)	(ml/min)	A	B
0	1	55	45
5	1	50	50
8	1	40	60
12	1	30	70
19	1	0	100
22	1	0	100
23	1	55	45

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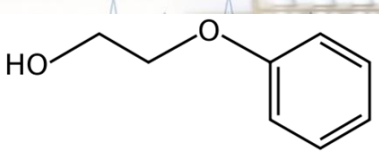
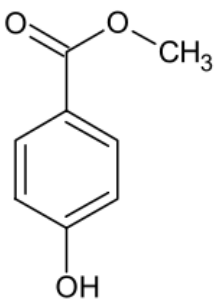
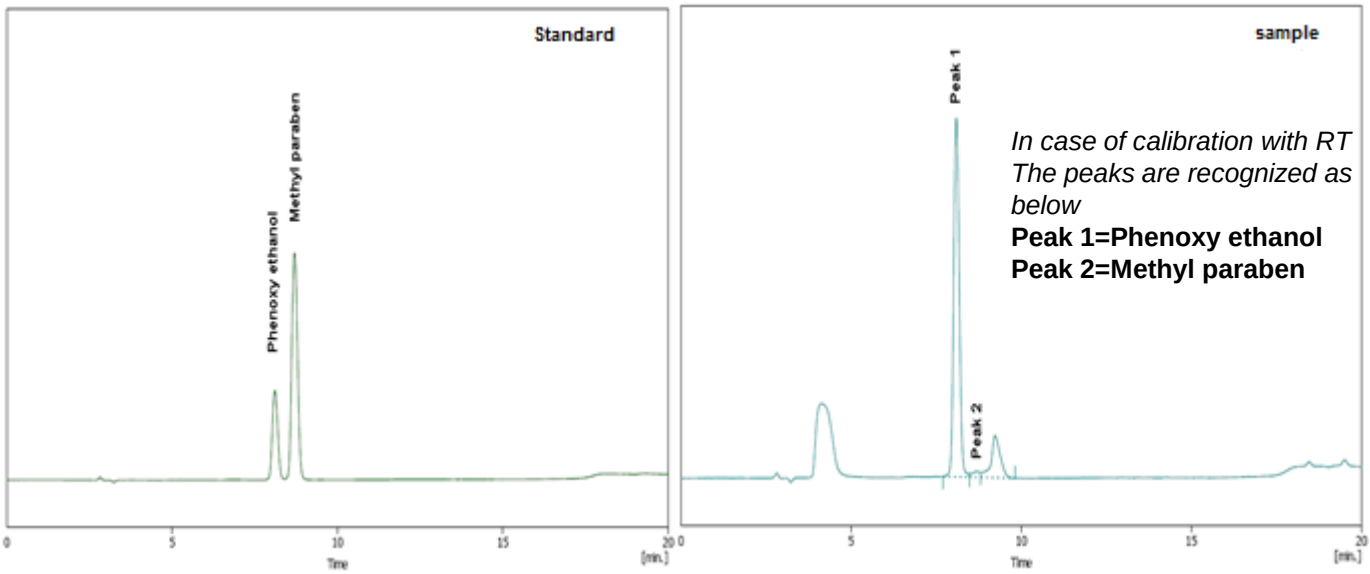


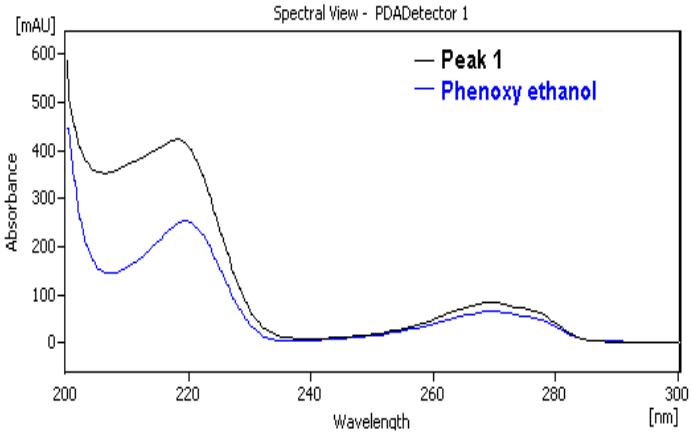


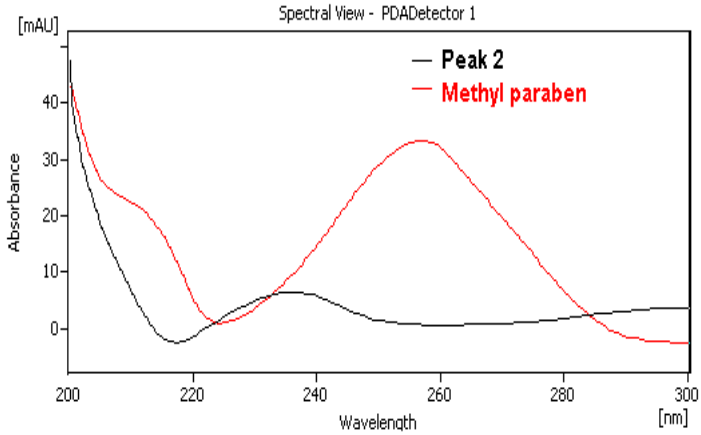
Phenoxy ethanol & Methyl paraben Analysis by PDA(Photodiode Array)

<Chromatogram>



<Comparison to each components by PDA spectrums>





Peak 1 and Phenoxy ethanol are same **spectrum pattern each so** it can be recognized as same components, **Peak 2** and **Methyl paraben are different spectrum pattern each** and ***same RT but it could be judged as different impurities.***

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