

INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY

Sophisticated Analytical Instrument Facility (SAIF)

ANALYSIS REQUEST FORM AND SAFETY DATA SHEET -LCMS/QTOF/Orbitrap

User Type: IITB/ External (University/National Lab/R & D/Industry)

Name of the user: SARAVANAN R

Email: saravanan.r@vit.ac.in

Contact No: 7305602788

Name of the Institute/Organization: Vellore Institute of technology

Address of Institute / Organization: Vellore Institute of
Technology, Vellore Campus, Tiruvalam Road, Katpadi, Vellore,
Tamil Nadu 632014

Name of Guide: Dr. Jeevitha G C

Email: jeevitha.gc@vit.ac.in

Contact No : 9080860471

1. Sample Code/Name: A

2. Number of Samples: 1

Kindly Tick whichever is applicable for the following:

3. Analysis required- Qualitative

4. Details of Analysis required: Identification of phenolic compounds by HRLCMS-QTOF

5. Expected compounds with empirical formula: Gallic acid ($C_7H_6O_5$), ellagic acid ($C_{14}H_6O_8$), ferulic acid ($C_{10}H_{10}O_4$), caffeic acid ($C_9H_8O_4$), quercetin ($C_{15}H_{10}O_7$), kaempferol ($C_{15}H_{10}O_6$), mangiferin ($C_{19}H_{18}O_{11}$), rutin ($C_{27}H_{30}O_{16}$)

6. Sample Type: Liquid

7. Sample Category: Plant Extracts

8. Sample volume/concentration/weight/specify concentration: Since the sample is a plant extract kindly inject sample volume of 10 μ l (ref: attached article).

9. Sample Preparation: Required (Given sample was already filtered using 0.20 μ m syringe filter, if needed kindly filter it according to instrument requirement)

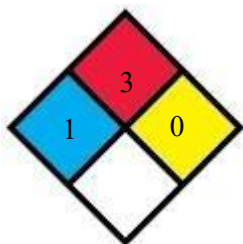
10. Solvents required- 0.05% (v/v) formic acid (solvent A) and methanol (solvent B)

11. Sample nature: Organic

12. Moisture: Absent

13. Volatile organic compound: Present

- 14. Stability of sample:** Stable under RTP, Reactive in light
- 15. Specify the Storage and handling conditions:** Refrigeration
- 16. Sample Properties:** Non-Carcinogenic (Toxic and Flammable)
- 17. Whether incompatible with any material-** No
- 18. Toxicity:** Non-Hazardous
- 19. Health hazards:** No
- 20. First aid measures:** Eye (Wash with water)/Skin (wash with soap and water)
- 21. Disposal Method of sample:** Collect as organic solvent waste and dispose through the institute's chemical waste system
- 22. Additional information if any:** Natural plant extract, no known toxic or radioactive components
- 23. Label the sample(s)/ sample container(s) with hazard category**
- 24. All Samples will be discarded within 7 days of analysis. If you wish to collect the samples then you are required to make arrangement for the same. SAIF office will not dispatch the same to users under any circumstances.**
- 25. MSDS (should be uploaded/ attached if available):** Attached (Yes)
- 26. Please fill in appropriate numbers in the NFPA diamond: (*Kindly refer the image at the end of the file for reference):**



Declaration

I confirm that the samples submitted for analysis are for research purpose only and the above furnished details are correct and true to the best of my knowledge. I understand that I will be held responsible for any damages arising from incorrect information provided by me against points 16-19.

I agree to acknowledge DST and SAIF/CRNTS, IIT Bombay for providing (Instrument name) analytical facility for my research work, in my publications. I also agree to send the publication reference (Journal name/volume number/names of the authors/date of issue of the publication etc) to office.saif@iitb.ac.in

I declare that the “Content of this report is meant for our information only and we will not use the content of this report for advertisement, evidence, litigation or quote as certificate to third party”

I accept that all the issued reports/results (Soft/hard) will not carry any Signature or Seal and Stamp of SAIF/CRNTS IIT Bombay.


Signature of the User


Signature of the In Charge/HOD/PI with College / P.I. / Guide
seal / stamp

Date: 22/10/2026

Place: Vellore.



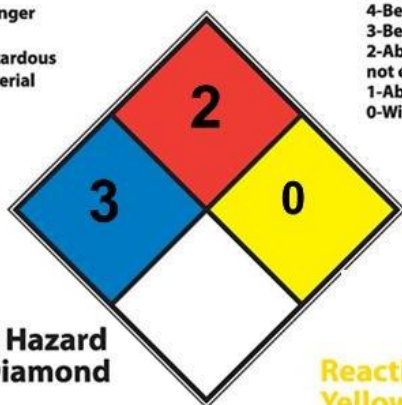
* refer the image below for reference for filling up Point 26:

Health Hazard Blue Diamond

4-Deadly
3-Extreme Danger
2-Hazardous
1-Slightly Hazardous
0-Normal Material

Fire Hazard Red Diamond

Flash Points
4-Below 73°F
3-Below 100°F
2-Above 100°F
not exceeding 200°F
1-Above 200°F
0-Will not burn



Specific Hazard White Diamond

ACID - Acid
ALK - Alkali
COR - Corrosive
OXY - Oxidizer
☢ - Radioactive
☒ - Use No Water

Reactivity Yellow Diamond

4-May Detonate
3-Shock & Heat
may detonate
2-Violent Chemical
change
1-Unstable if heated
0-Stable