

# INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY

Sophisticated Analytical Instrument Facility (SAIF)

## ANALYSIS REQUEST FORM AND SAFETY DATA SHEET-NMR

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

Name of the user:
Email
Contact No:
Name of the Institute/Organization:
Address of Institute / Organization:

Name of Guide/PI:
Email
Contact No

**1. Sample Codes/Names:-**

**2. Number of Samples:**

**3. Details of Analysis required** (Please enter appropriately as per your requirement)

**a) Solution State 1D NMR**

Nuclei of interest (eg.  $^1\text{H}$ ,  $^{13}\text{C}$ ,  $^{31}\text{P}$ , etc.) -----

Required Spectral range (ppm) -----

\*Solvent in which sample is soluble (Please write the name of the solvent to be used, against each sample code) -----

\* You may attach a separate sheet with the names of samples and solvent to be used.

**b) Solution State 2D NMR**

Type of Experiment (eg. COSY, TOCSY, NOESY, HSQC, etc.) -----

\*Solvent in which sample is soluble (Please write the name of the solvent to be used, against each sample code) -----

\* You may attach a separate sheet with the names of samples and solvent to be used.

List of Deuterated Solvents that are available in Lab

$\text{CDCl}_3/\text{D}_2\text{O}/\text{DMSO}/\text{Benzene}/\text{Methanol}/\text{Acetone}/\text{DMF}/\text{Acetonitrile}/\text{Trifluoroacetic acid}/\text{Pyridine}$ .

**c) \*\*Solid State 1D NMR ( $^1\text{H}$  NMR not possible in Solid state mode)**

Nuclei of interest (eg.  $^{13}\text{C}$ ,  $^{31}\text{P}$ ,  $^{29}\text{Si}$ , etc.) -----

Required Spectral range (ppm) -----

\*\* At least 300-400 mg of very finely powdered sample is required.

**d) Any other special experiments like:**

i) **Variable Temperature** experiments (Specify Temp.) -----

ii) **Quantitative NMR (qNMR)** (You may please contact NMR lab for more details on this)

**5. Moisture:** Present/Absent/NA

**6. Sample nature:** Organic/Inorganic/Magnetic/ Non Magnetic /Any other characteristic nature  
(Specify)

**7. Sample Properties:** Carcinogenic (carcinogenicity level-----) /Non Carcinogenic/  
Radioactive/Explosive/Toxic/Corrosive/Flammable/ Non flammable/ Other(specify)

**8. Stability of sample:** Stable under RTP/hygroscopic/sublimes/ Reactive in air/moisture/ light/heat

**9. Toxicity:** Non-Toxic / Mildly toxic/ Highly toxic.

**10. Potential Health Hazards:** Yes/No (irritant to skin/irritant to eyes/harmful to skin/ toxic if  
inhaled/toxic if ingested)

**11. Precautions for Safe Handling and Use:**

**12. Symptoms on Exposure:** Difficulty in breathing/reddening of skin/burning sensation in  
eyes/vomiting/giddiness/headache/unconsciousness/---Others(specify)

**13. First aid measures:**

**14. Disposal Method of sample**

**15. Label the sample/ sample container with hazard class**

**16. 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.**

**17. Please fill in appropriate numbers in the NFPA diamond if MSDS available: (#Kindly refer the  
image at the end of the file for reference):**



**18. Additional information if any**

**19. MSDS (should be uploaded/attached if available)**

**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 7-10.

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](mailto: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:

Place:

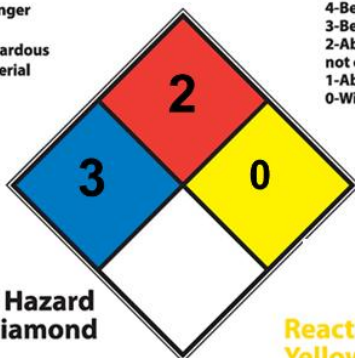
#refer the image below for reference for filling up Point 17:

**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