

INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY

DEPARTMENT OF CHEMISTRY

ANALYSIS REQUEST FORM AND SAFETY DATA SHEET - 500 MHz NMR

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

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

1. Sample Information:

- **Sample Code/Name:** _____
 - **Number of Samples:** _____
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2. Details of Analysis Required:

a) Liquid-State NMR

- **Solvent Required (CDCl₃, DMSO-d₆, etc.):** _____
- **NMR Experiments Required (¹H, ¹³C, DEPT, HSQC, HMBC, etc.):**

- **Temperature Variation (if required, specify):** _____

- **Minimum Sample Requirement:** 15-20 mg (solubility dependent)

b) Solid-State 1D NMR (¹H NMR is not possible in solid-state mode)

- **Nuclei of Interest (e.g., ¹³C, ³¹P, ²⁹Si, etc.):** _____
- **Required Spectral Range (ppm):** _____
- **Minimum Sample Requirement:** 150-200 mg of finely powdered material

c) Special Experiments (if required):

- **Variable Temperature Experiments (Specify Temp.):**

3. Sample Characteristics:

- **Moisture Content:** Present / Absent / Not Applicable
- **Sample Type:** Organic / Inorganic / Magnetic / Non-Magnetic / Other (Specify):

- **Physical Properties:** Carcinogenic (*Specify Level:* _____) / Non-Carcinogenic / Radioactive / Explosive / Toxic / Corrosive / Flammable / Non-Flammable / Other (*Specify:* _____)
- **Stability:** Stable at Room Temperature / Hygroscopic / Sublimes / Reactive to Air / Moisture / Light / Heat
- **Toxicity Level:** Non-Toxic / Mildly Toxic / Highly Toxic

4. Health and Safety Information:

- **Potential Hazards:** Yes / No (*If Yes, specify: Irritant to Skin / Eyes / Harmful to Skin / Toxic if Inhaled / Ingested*)
- **Precautions for Handling:** _____

- **Symptoms of Exposure:** Difficulty in Breathing / Skin Reddening / Eye Irritation / Vomiting / Dizziness / Headache / Unconsciousness / Other (*Specify: _____*)
 - **First Aid Measures:** _____
 - **Sample Disposal Method:** _____
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5. Sample Handling Policy:

- All samples must be properly labelled with hazard classification.
 - Samples will be **discarded within 7 days** of analysis.
 - Users must arrange for sample collection if required, as the **NMR lab will not dispatch** samples.
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6. Additional Information:

- **NFPA Hazard Diamond (If MSDS Available):** Fill in the appropriate values.

The diagram shows an NFPA Hazard Diamond, a diamond shape divided into four triangles. The top triangle is red (Fire Hazard), the left triangle is blue (Health Hazard), the right triangle is yellow (Reactivity), and the bottom triangle is white (Specific Hazard). The diamond in the image contains the numbers 2 in the red section, 3 in the blue section, and 0 in the yellow section.

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

7. MSDS Declaration:

I certify that the submitted samples are for research purposes only, and the provided information is accurate to the best of my knowledge. I understand that I am responsible for any consequences arising from incorrect information provided in Sections 3 & 4.

I agree to acknowledge DST and the Department of Chemistry, IIT Bombay, for providing the 500 MHz Solid-State NMR facility in any related publications. I will also share publication details (journal name, volume, author names, issue date, etc.) at choffice@chem.iitb.ac.in.

I declare that the content of this report is for internal use only and will not be used for advertisement, evidence, litigation, or certification purposes.

I accept that all reports (soft/hard copies) will not bear any official signatures, seals, or stamps from the Department of Chemistry, IIT Bombay.

Signature of the User

Signature of the In-Charge/HOD/PI with Seal/Stamp

Date: _____