INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY
Sophisticated Analytical Instrument Facility (SAIF)

ANALYSIS REQUEST FORM AND SAFETY DATA SHEET – **TGDTA**
User Type: IITB/ EXTERNAL (University/National Lab/R & D /Industry)

Name of the User: AMARVEER PRATAP RANA	Name of Guide/ PI: Dr. JAGADISH DAS
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Name of Institute/Organization: IIT PATNA	
Address of Institute/Organization: IIT Patna, Bihta - 801106 (Bihar)	

1. Number of Samples: 4
2. Heating Program: (Add more rows if required OR attach a separate sheet)

S. No.	Sample Name	Temp. range (RT to .....°C)	Heating rate (Ramp) °C/min	Atmosphere (N_2, Ar, Air, O_2)	Analysis reqd. TGA/ DTA/ Both
1.	AR-1	RT to 800°C	10°C/min	N_2	TGA
2.	AR-2	RT to 800°C	10°C/min	N_2	TGA
3.	AR-3	RT to 800°C	10°C/min	N_2	TGA
4.	AR-4	RT to 800°C	10°C/min	N_2	TGA
5.					

Samples containing alkali metal oxides, hydroxides, heavy metals, alkali metal halides, nitrates or large amounts of sulphur when heated in platinum crucible can erode the crucible.

3. Does the sample contain any Halogens/ Corrosive substance? YES / NO ✓
4. Hygroscopic or non-hygroscopic: Non-hygroscopic
5. Explosive or non-explosive at higher temp: Non-explosive
6. Does your sample contain any heavy metals like lead, bismuth, tin, arsenic, silver, mercury, copper, Selenium, tellurium, etc.? If yes, specify. It Contains Copper (AR-1, % Cu – 11.27%, AR-2, % Cu – 11.11%, AR-3, % Cu – 11.95%, AR-4, % Cu – 8.05%)

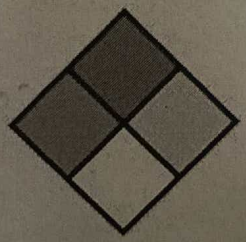
Notes:

- At least 30-40 mg of sample should be submitted.
- Sample size should be < 5mm in diameter and <2.5 mm in thickness.
- Samples with corrosive substance that will react with Aluminium/Platinum/Ceramic pans at the should not be sent for analysis by TGDTA or DSC.
- Samples should not be toxic or hazardous.
- Radio-active material, unstable and explosive compounds are not accepted for analysis.
- Interpretation of spectra is NOT undertaken.

Additional Information

1. Moisture: Present/Absent/NA
2. Sample nature: Organic/Inorganic /Any other characteristic nature(Specify)
3. Sample Properties: Carcinogenic (carcinogenicity level-------)/Non Carcinogenic/ Radioactive/Explosive/Toxic/Corrosive/Flammable/ Non flammable/ Other(specify)
4. Stability of sample: Stable under RTP/hygroscopic/sublimes/ Reactive in air/moisture/ light/heat
5. Toxicity: Non-Toxic / Mildly toxic/ Highly toxic.
6. Potential Health Hazards: Yes/No (irritant to skin/irritant to eyes/harmful to skin/ toxic if inhaled/toxic if ingested)
7. Precautions for Safe Handling and Use: Use of nitrile glove is sufficient for handling
8. Symptoms on Exposure: Difficulty in breathing/reddening of skin/burning sensation in eyes/vomiting/giddiness/headache/unconsciousness/ ---------- Others(specify) No health related Problem.
9. First aid measures: Washing with water.
10. Disposal Method of sample Non hazardous sample, so can be disposed with other solid material
11. Label the sample/ sample container with hazard class Non-hazardous.
12. 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. Please discard the sample after measurement.
13. Please fill in appropriate numbers in the NFPA diamond if MSDS available: (#Kindly refer the image at the end of the file for reference):

MSDS Not available



Declaration

I confirm that the samples submitted for analysis are for research purposes only and that 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, 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

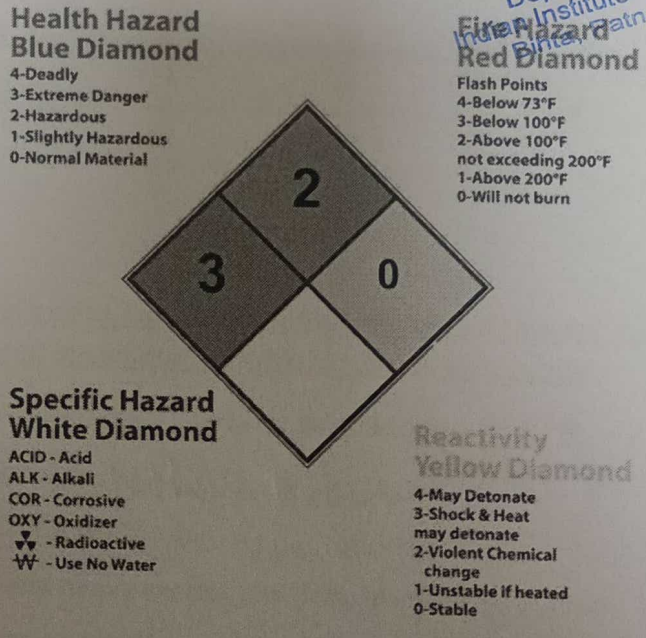
I declare that the "Content of this report is meant for our information only and we will not use the content of this report for advertisement, evidence, litigation or quote as certificate to third party" I accept that all the issued reports/results (Soft/hard) will not carry any Signature or Seal and Stamp of SAIF/CRNTS IIT Bombay.

AMARVEER PRATAP RANA
Signature of the User

Date: 17/10/25
Place: IIT PATNA
DEPT OF CHEMISTRY

Jagadish 17.10.25
Signature of the In Charge/HOD/PI with College P.I. / Guide seal / stamp

Dr. Jagadish Das
Assistant Professor
Dept. of Chemistry
Indian Institute of Technology
Bihta, Patna-801106



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