## INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY

Sophisticated Analytical Instrument Facility (SAIF)

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

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

- 1. Number of Samples: (Max 5 Spls for Internal Users):
- 2. Heating Program: (Add more rows *{only for External Users}* if required OR attach a separate sheet)

S. No.	Sample Name	Decomposition Temperature (Mandatory)	Temperature Range <u>Final Temp. should be at</u> <u>least 10-20 °C below the</u> <u>Decomposition Temp.</u>	Heating rate °C/min	Atmosphere (N <sub>2</sub> , Ar, Air, O <sub>2</sub> )
1.					
2.					
3.					
4.					
5.					

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

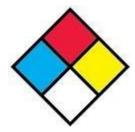
- 3. Does the sample contain any Halogens/ Corrosive substance? YES / NO
- 4. Hygroscopic or non-hygroscopic:
- 5. Explosive or non-explosive at higher temp:
- 6. Does your sample contain any heavy metals like lead, bismuth, tin, arsenic, silver, mercury, copper, Selenium, tellurium, etc.? If yes, specify.

## 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 higher temperature 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)
- 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
- 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:
- 8. Symptoms on Exposure: Difficulty in breathing/reddening of skin/burning sensation in eyes/vomiting/giddiness/headache/unconsciousness/------Others(specify)
- 9. First aid measures:
- 10. Disposal Method of sample
- 11. Label the sample/ sample container with hazard class
- 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.
- 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):



## **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

I declare that the "Content of this report is meant for our information only and we will not use the content ofthis 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

change 1-Unstable if heated

Date: Place:

**Health Hazard Fire Hazard Blue Diamond Red Diamond** 4-Deadly Flash Points 4-Below 73°F 3-Below 100°F 3-Extreme Danger 2-Hazardous 1-Slightly Hazardous 2-Above 100°F not exceeding 200°F 1-Above 200°F 0-Normal Material 2 0-Will not burn 3 0 **Specific Hazard White Diamond** Reactivity ACID - Acid ellow Diamond ALK - Alkali 4-May Detonate **COR - Corrosive** OXY - Oxidizer may detonate 2-Violent Chemical - Radioactive

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

- Use No Water