

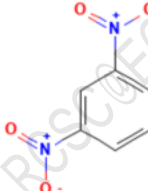


## DSC Testing Report for 1,3-Dinitrobenzene

Report #:	ECUST-RCSC-20240912-X23		
Institute:	Reactive Chemical Safety Center at East China University of Science and Technology, Shanghai, China. RCSC@ECUST ( <a href="https://rcsc.ecust.edu.cn/">https://rcsc.ecust.edu.cn/</a> )		
Analyst:	Lei Dong	Test time:	2025-03-11
Reporter:	Lei Dong	Report time:	2025-03-30
Reviewer:	Min Sheng	Review time:	2025-06-19
Limits of Applicability:	The testing data generated by the RCSC@ECUST is based on specific samples from a certain supplier. During the testing process, we have made every effort to ensure the reliability of the data, but we still cannot exclude data quality issues caused by supplier differences, sample impurities, deterioration of long-term storage, testing method error, and human error. Therefore, we suggest only using RCSC testing data as a reference, and we do not assume any responsibility for any losses caused by using this data.		
Data Copyright:	Prohibit the sharing of this report on websites outside the Reactive Chemical Safety Center at East China University of Science and Technology. If you have any questions, please contact RCSC@ECUST ( <a href="https://rcsc.ecust.edu.cn/">https://rcsc.ecust.edu.cn/</a> ).		

Chemical Names	1,3-Dinitrobenzene
Synonyms	m-dinitrobenzene
Molecular Formula	C <sub>6</sub> H <sub>4</sub> N <sub>2</sub> O <sub>4</sub>
Hill Notation Formula	C <sub>6</sub> H <sub>4</sub> (NO <sub>2</sub> ) <sub>2</sub>
CAS #	99-65-0
Test	DSC_N2
Notes	Glass capillary, 0~500 °C, 10°C/min, Nitrogen headspace

Detail information of the tested sample:

Project	Development of Reactive Chemical Database for RCSC@ECUST
Sample Description	white crystal
Composition	99%
Chemical Structure	
Supplier	Adamas-beta
Storage Information	
Sample Status	white crystal
Other notes	

Testing Result:

1 <sup>st</sup> test					
Instrument: TA DSC X3		DSC crucible: Glass Capillary		Headspace gas: N2	
Tested sample mass: 0.244 mg		Total pre-test mass: 25.783 mg		Total post-test mass: 25.781 mg	
Start Temperature: 0°C		Scan rate: 10°C/min (Twice)		End Temperature: 500°C	
#	Endo/Exo Peak	Onset T (°C)	Peak T (°C)	End T (°C)	Total Heat (J/g)
1	Endotherm	85	90	105	117.74
2	Exotherm	380	441	489	-3096.0 <sup>a</sup>

Notes: <sup>a</sup>, The TNT equivalent is 0.74.

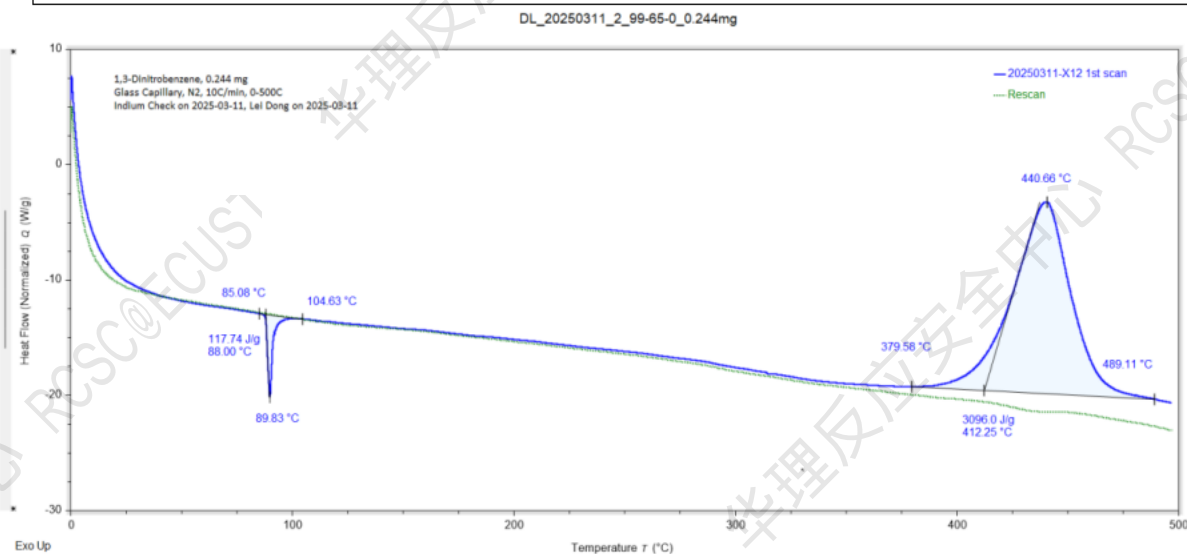


Figure 1. DSC Curve with Auto scale, the solid line represents the first scan (with integration); The dashed line represents the second scan



Figure 2. Tested Sample Pictures (original package, tested sample before test and after test)

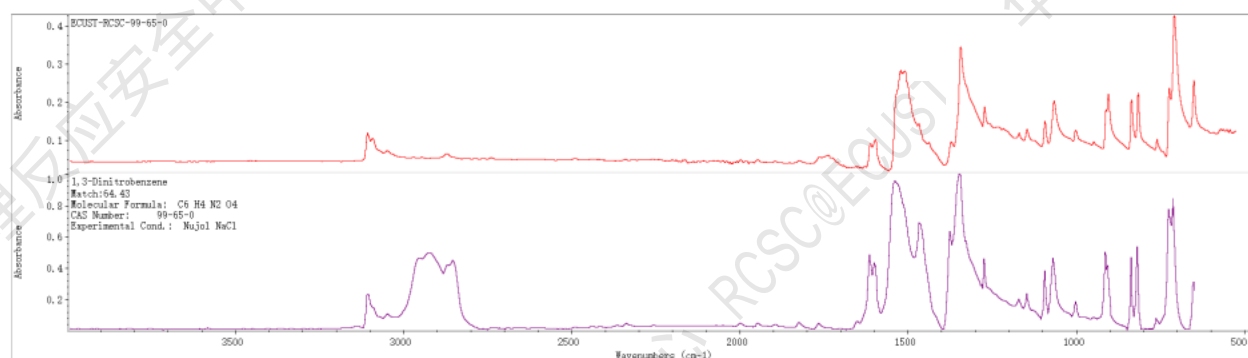


Figure 3. FTIR Spectrum of the Tested Sample