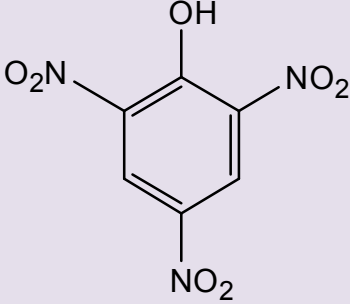
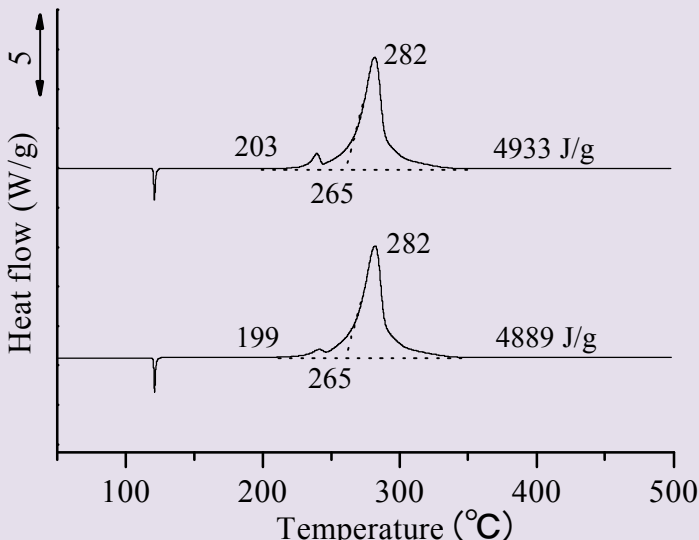
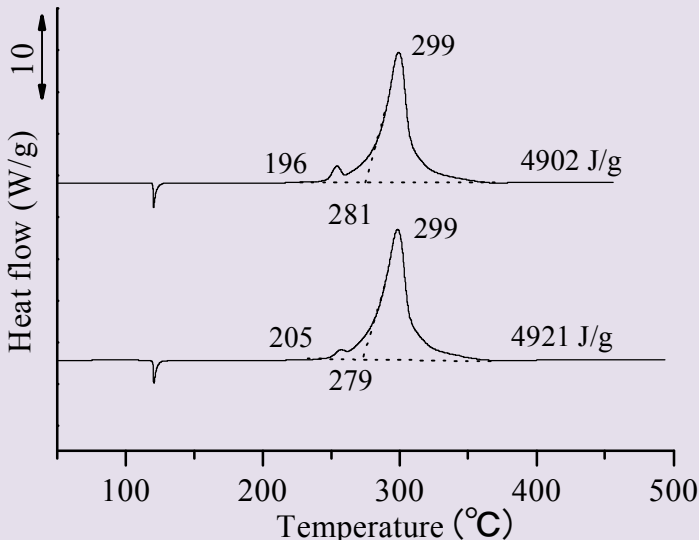
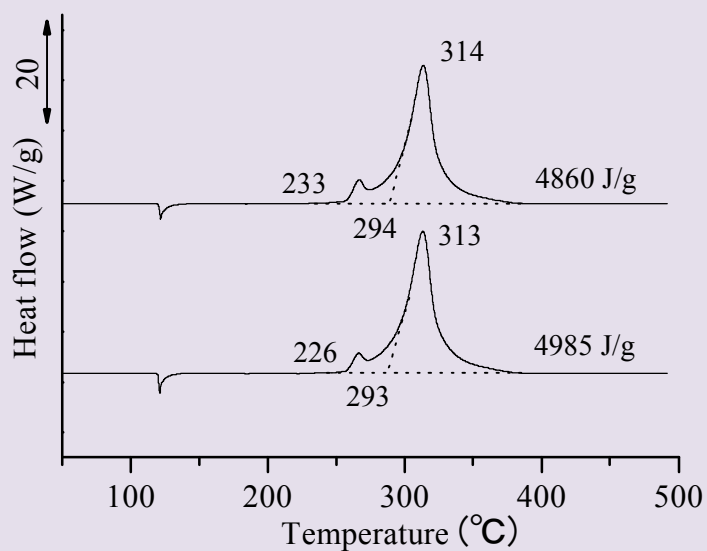


Trinitrophenol	$C_6H_2(OH)(NO_2)_3$ TNP										
	DSC device: SII DSC 7020 SII Nano Technology Inc. dT/dt: 2, 5, 10, 20 K/min Atmosphere: Air Vesel: pressure vessel (SUS) SII Nano Technology Inc. Sample: Wako ($\geq 99.5\%$)										
Wako: 和光純薬工業株式会社											
<p>a) 2 K/min</p>  <table border="1" data-bbox="1029 907 1340 1176"> <thead> <tr> <th colspan="2">< Average ></th> </tr> </thead> <tbody> <tr> <td>T_a</td> <td>202 °C</td> </tr> <tr> <td>T_o</td> <td>265 °C</td> </tr> <tr> <td>T_{top}</td> <td>282 °C</td> </tr> <tr> <td>Q_{DSC}</td> <td>4911 J/g</td> </tr> </tbody> </table>		< Average >		T_a	202 °C	T_o	265 °C	T_{top}	282 °C	Q_{DSC}	4911 J/g
< Average >											
T_a	202 °C										
T_o	265 °C										
T_{top}	282 °C										
Q_{DSC}	4911 J/g										
<p>b) 5 K/min</p>  <table border="1" data-bbox="1029 1556 1340 1825"> <thead> <tr> <th colspan="2">< Average ></th> </tr> </thead> <tbody> <tr> <td>T_a</td> <td>201 °C</td> </tr> <tr> <td>T_o</td> <td>280 °C</td> </tr> <tr> <td>T_{top}</td> <td>299 °C</td> </tr> <tr> <td>Q_{DSC}</td> <td>4912 J/g</td> </tr> </tbody> </table>		< Average >		T_a	201 °C	T_o	280 °C	T_{top}	299 °C	Q_{DSC}	4912 J/g
< Average >											
T_a	201 °C										
T_o	280 °C										
T_{top}	299 °C										
Q_{DSC}	4912 J/g										

c) 10 K/min



< Average >

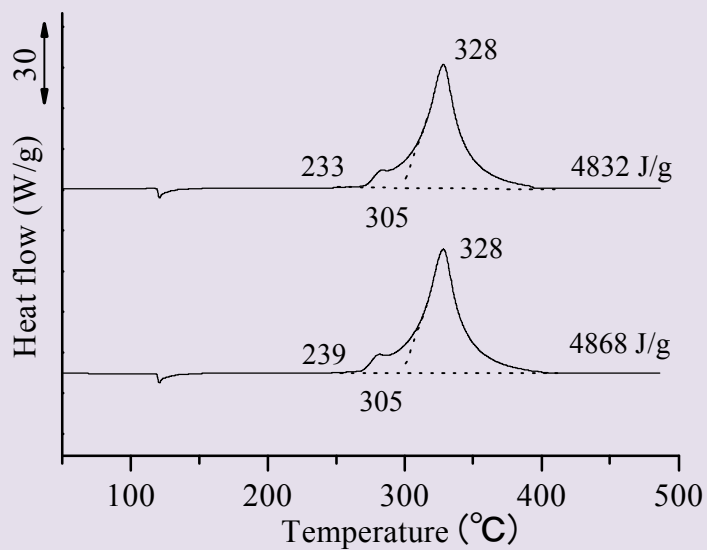
T_a : 230 °C

T_o : 294 °C

T_{top} : 314 °C

Q_{DSC} : 4923 J/g

d) 20 K/min



< Average >

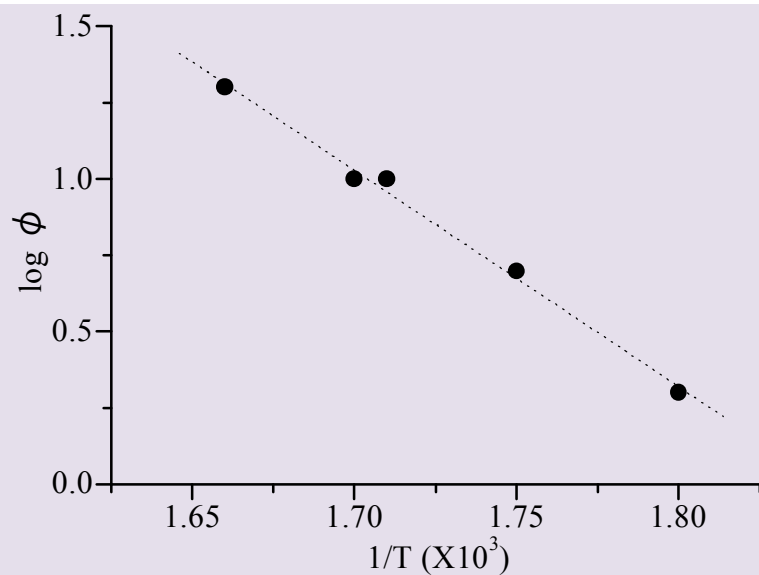
T_a : 236 °C

T_o : 305 °C

T_{top} : 328 °C

Q_{DSC} : 4850 J/g

ASTM PLOT



ΔE : 132 kJ/mol
 A : 2.68×10^{23}
 r : -0.99779

Heat rate ϕ (K/min)	T_{peak} (°C)	T_m (K)	$1/T_m \cdot 10^3$	$\log \phi$
2	282	555	1.80	0.301
	282	555	1.80	0.301
5	299	572	1.75	0.699
	299	572	1.75	0.699
10	314	587	1.70	1.00
	313	586	1.71	1.00
20	328	601	1.66	1.30
	328	601	1.66	1.30