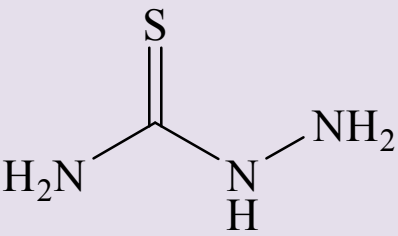
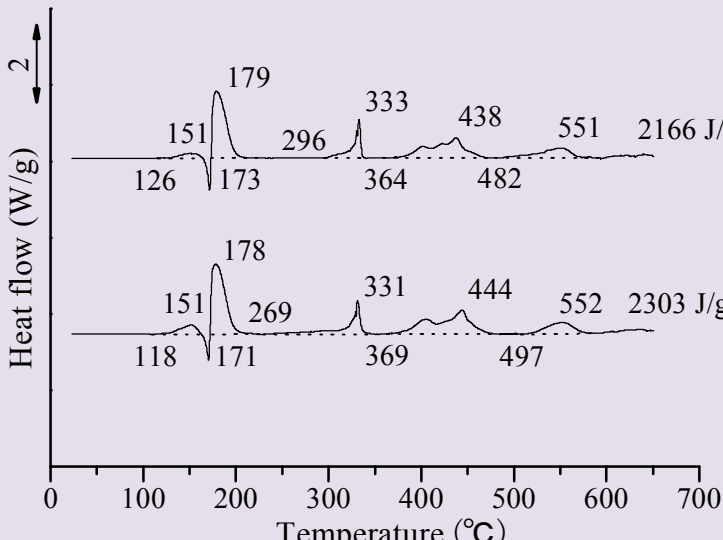
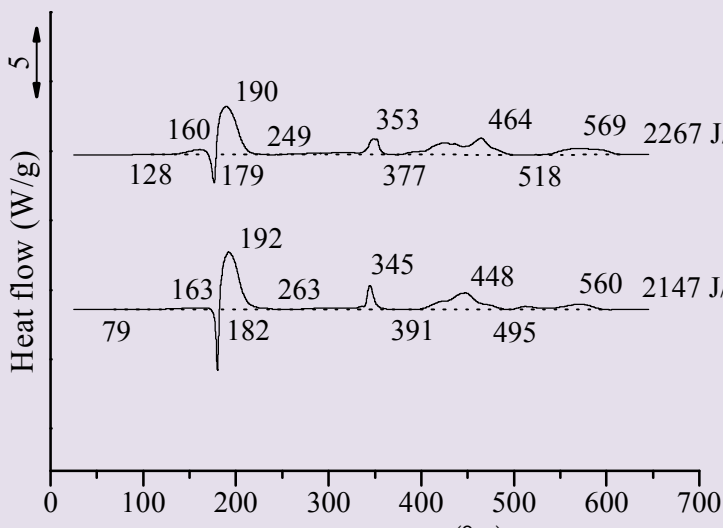
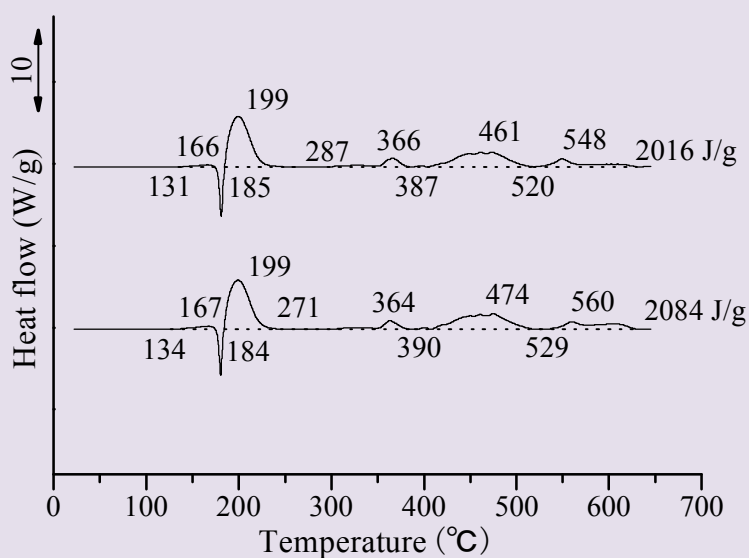


Thiosemicarbazide	H ₂ NCSNHNH ₂ TSC
	DSC device: SII DSC 7020 SII Nano Technology Inc. dT/dt: 2, 5, 10, 20 K/min Atmosphere: Air Vesel: pressure vessel (SUS) SII Nano Technology Inc. Sample: Wako (> 98.0%)
a) 2 K/min Wako: 和光純薬工業株式会社	
 <div style="float: right; margin-top: 20px;"> <p><Average></p> <p>T_a: 172 °C</p> <p>T_o: 172 °C</p> <p>T_{top}: 179 °C</p> <p>Q_{DSC}: 2235 J/g</p> </div>	
b) 5 K/min	
 <div style="float: right; margin-top: 20px;"> <p><Average></p> <p>T_a: 181 °C</p> <p>T_o: 181 °C</p> <p>T_{top}: 191 °C</p> <p>Q_{DSC}: 2207 J/g</p> </div>	

c) 10 K/min



<Average>

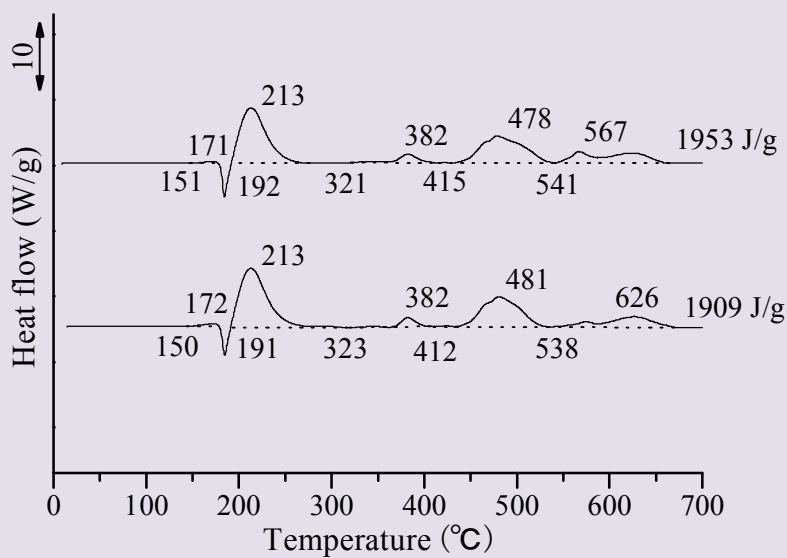
T_a : 185 °C

T_o : 185 °C

T_{top} : 199 °C

Q_{DSC} : 2050 J/g

d) 20 K/min



<Average>

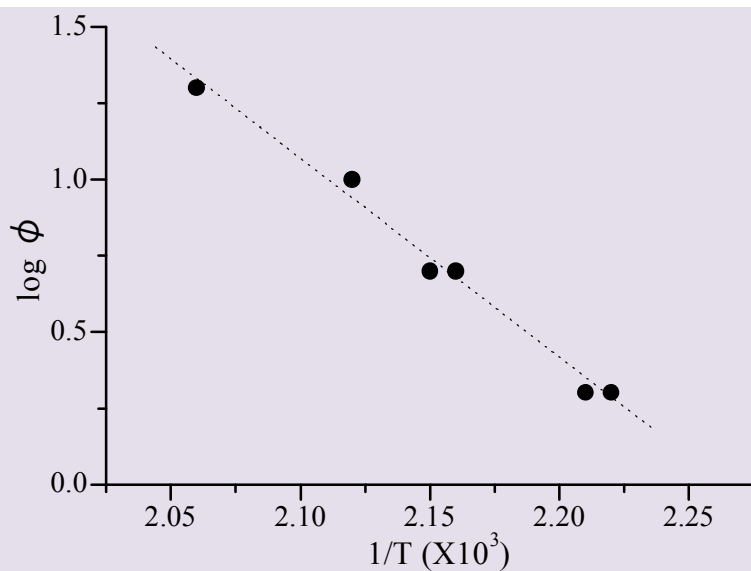
T_a : 192 °C

T_o : 192 °C

T_{top} : 213 °C

Q_{DSC} : 1931 J/g

ASTM PLOT



$\Delta E : 122 \text{ kJ/mol}$
 $A : 3.59 \times 10^{21}$
 $r : -0.99335$

Heat rate ϕ (K/min)	T_{peak} ($^{\circ}\text{C}$)	T_m (K)	$1/T_m \cdot 10^3$	$\log \phi$
2	179	452	2.21	0.301
	178	451	2.22	0.301
5	190	463	2.16	0.699
	192	465	2.15	0.699
10	199	472	2.12	1.00
	199	472	2.12	1.00
20	213	486	2.06	1.30
	213	486	2.06	1.30