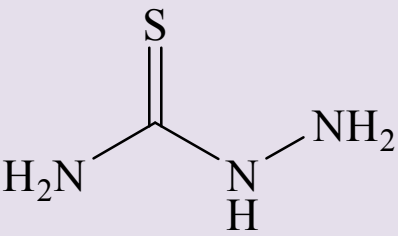
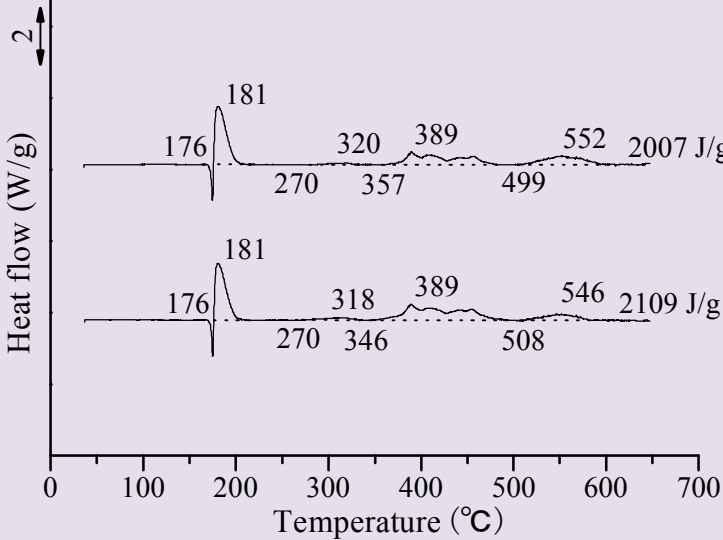
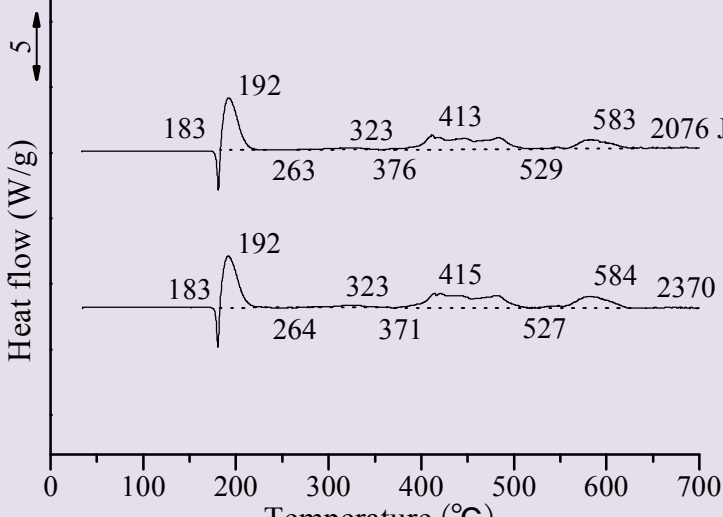
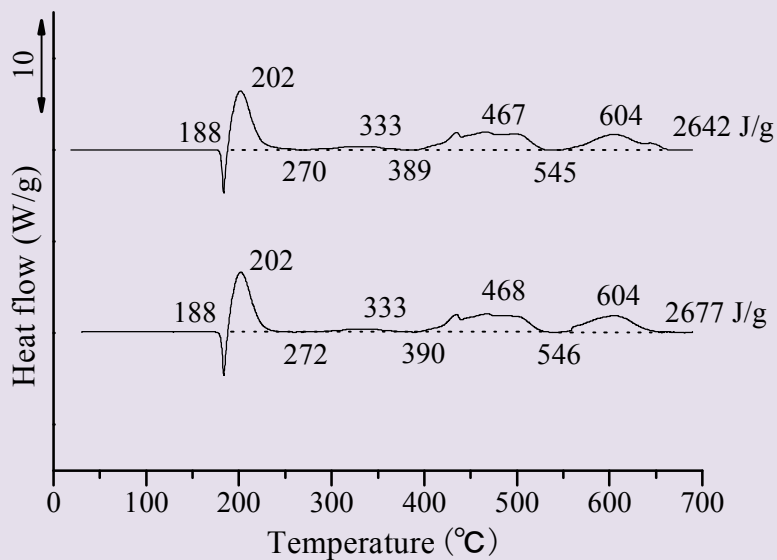


Thiosemicarbazide	H <sub>2</sub> NCSNHNH <sub>2</sub> TSC
	DSC device: DSC8270B Rigaku Corp. dT/dt: 2, 5, 10, 20 K/min Atmosphere: Air Vesel: pressure vessel (SUS) Rigaku Corp. Sample: Wako (> 98.0%)
a) 2 K/min <span style="float: right;">Wako: 和光純薬工業株式会社</span>	
 <div style="float: right; margin-top: 20px;"> <p>&lt;Average&gt;</p> <p>T<sub>a</sub>: 176 °C</p> <p>T<sub>o</sub>: 176 °C</p> <p>T<sub>top</sub>: 181 °C</p> <p>Q<sub>DSC</sub>: 2058 J/g</p> </div>	
b) 5 K/min	
 <div style="float: right; margin-top: 20px;"> <p>&lt;Average&gt;</p> <p>T<sub>a</sub>: 183 °C</p> <p>T<sub>o</sub>: 183 °C</p> <p>T<sub>top</sub>: 192 °C</p> <p>Q<sub>DSC</sub>: 2223 J/g</p> </div>	

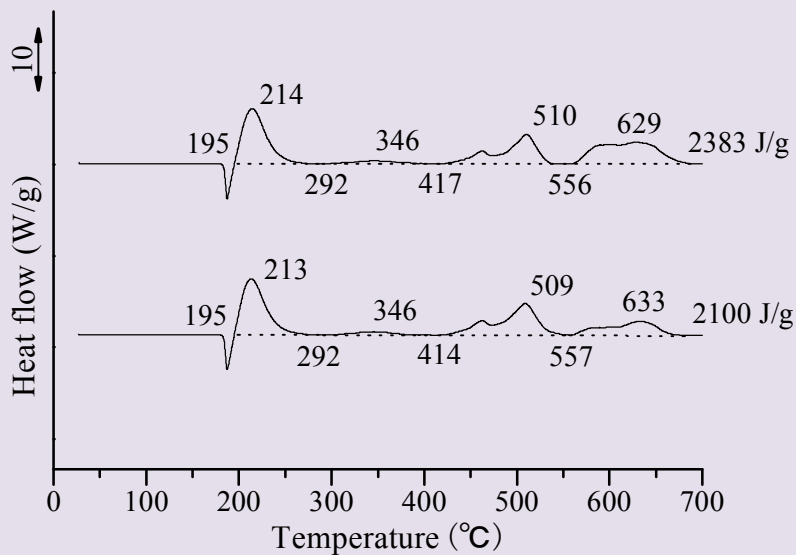
c) 10 K/min



< Average >

$T_a$  : 188 °C  
 $T_o$  : 188 °C  
 $T_{top}$  : 202 °C  
 $Q_{DSC}$  : 2660 J/g

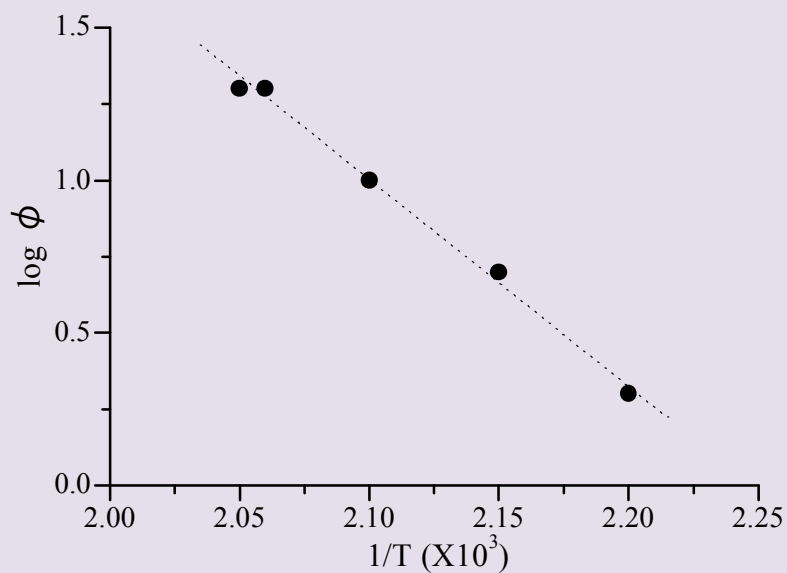
d) 20 K/min



< Average >

$T_a$  : 195 °C  
 $T_o$  : 195 °C  
 $T_{top}$  : 214 °C  
 $Q_{DSC}$  : 2242 J/g

## ASTM PLOT



Heat rate $\phi$ (K/min)	$T_{\text{peak}}$ (°C)	$T_m$ (K)	$1/T_m \cdot 10^3$	$\log \phi$
2	181	454	2.20	0.301
	181	454	2.20	0.301
5	192	465	2.15	0.699
	192	465	2.15	0.699
10	202	475	2.10	1.00
	202	475	2.10	1.00
20	214	487	2.05	1.30
	213	486	2.06	1.30