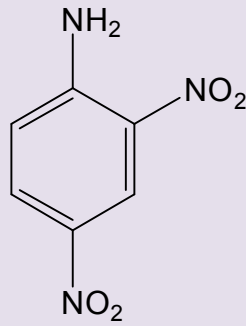
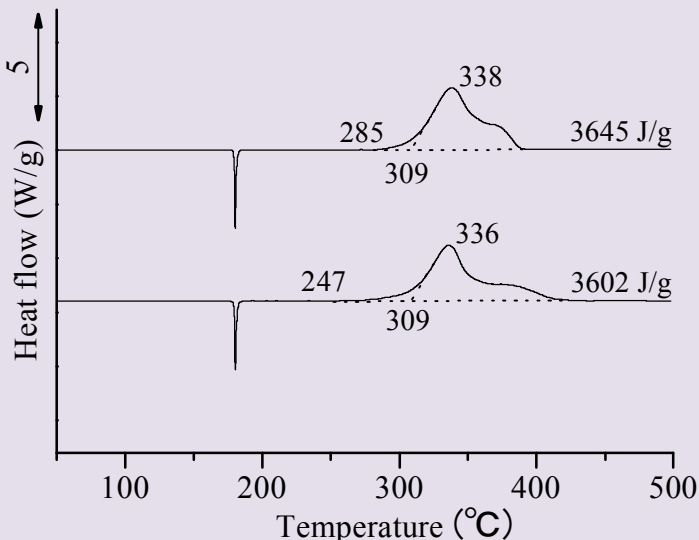
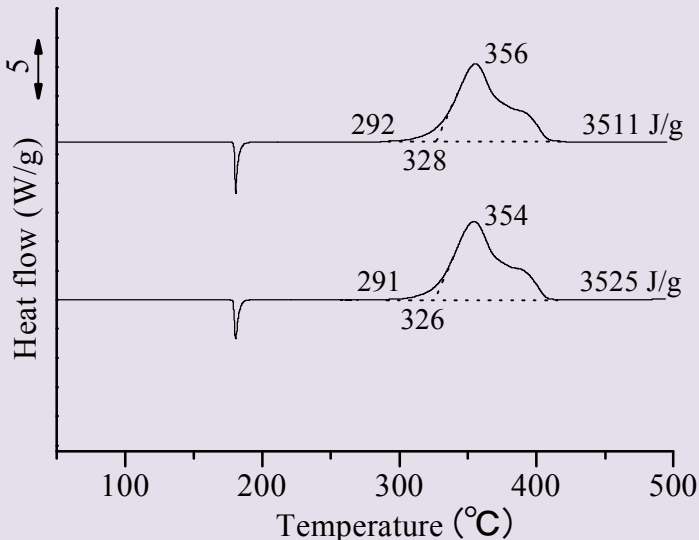
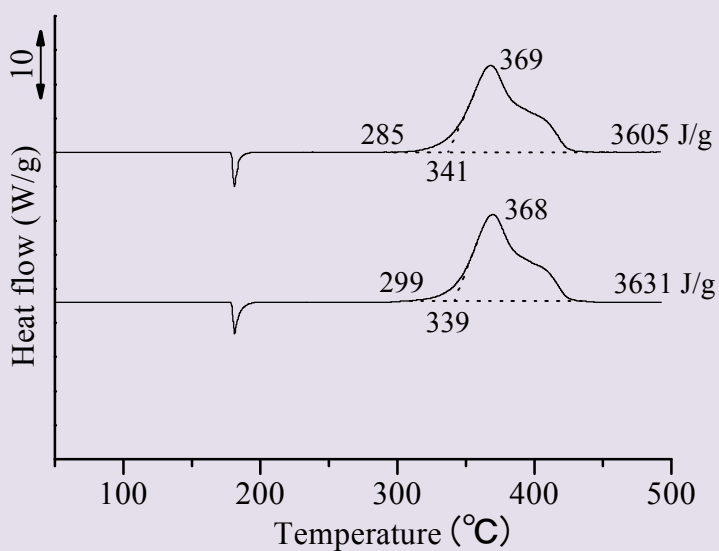


2,4-dinitroaniline	$C_6H_5N_3O_4$ DNA
	DSC device: SII DSC 7020 SII Nano Technology Inc. dT/dt: 2, 5, 10, 20 K/min Atmosphere: Air Vesel: pressure vessel (SUS) SII Nano Technology Inc. Sample: AlfaAesar (> 99%)
a) 2 K/min <span style="float: right;">AlfaAesar: AlfaAesar社 (販売 和光純薬工業株式会社)</span>	
	<Average> $T_a$ : 266 °C $T_o$ : 309 °C $T_{top}$ : 337 °C $Q_{DSC}$ : 3624 J/g
b) 5 K/min	
	<Average> $T_a$ : 292 °C $T_o$ : 327 °C $T_{top}$ : 355 °C $Q_{DSC}$ : 3518 J/g

c) 10 K/min



<Average>

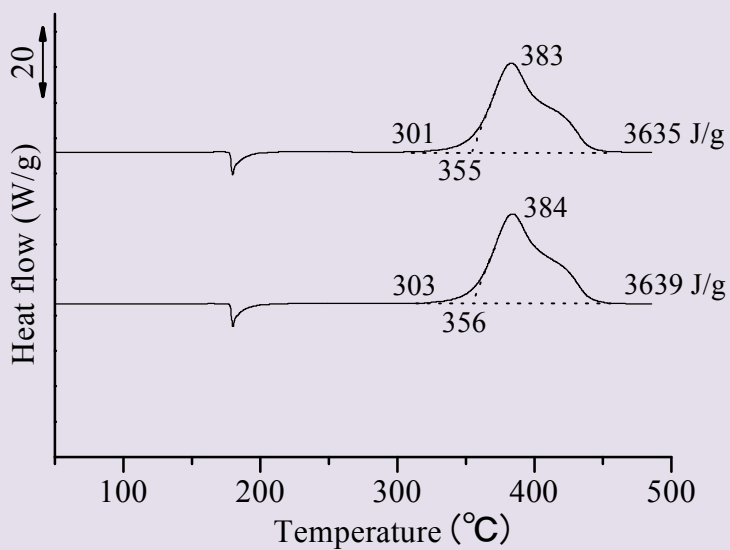
$T_a$  : 292 °C

$T_o$  : 340 °C

$T_{top}$  : 369 °C

$Q_{DSC}$  : 3618 J/g

d) 20 K/min



<Average>

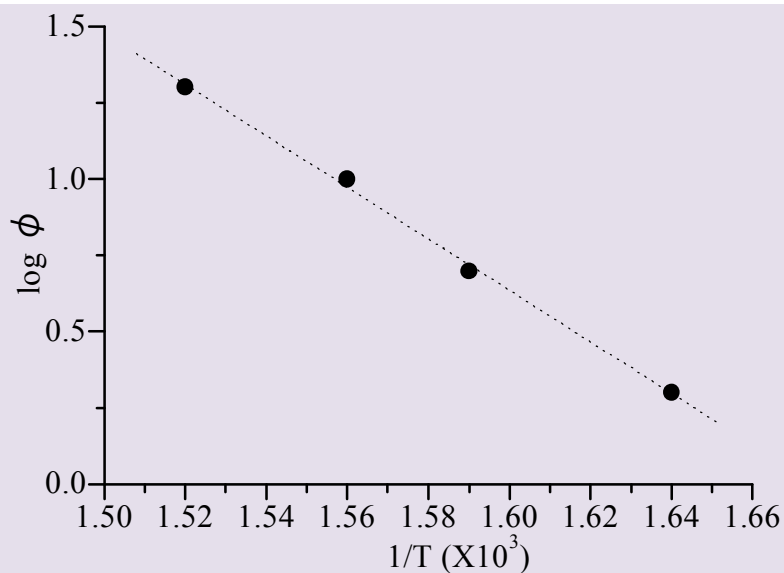
$T_a$  : 302 °C

$T_o$  : 356 °C

$T_{top}$  : 384 °C

$Q_{DSC}$  : 3637 J/g

## ASTM PLOT



$\Delta E$  : 157 kJ/mol  
 $A$  :  $8.07 \times 10^{27}$   
 $r$  : -0.99883

Heat rate $\phi$ (K/min)	$T_{\text{peak}}$ (°C)	$T_m$ (K)	$1/T_m \cdot 10^3$	$\log \phi$
2	338	611	1.64	0.301
	336	609	1.64	0.301
5	356	629	1.59	0.699
	354	627	1.59	0.699
10	369	642	1.56	1.00
	368	641	1.56	1.00
20	383	656	1.52	1.30
	384	657	1.52	1.30