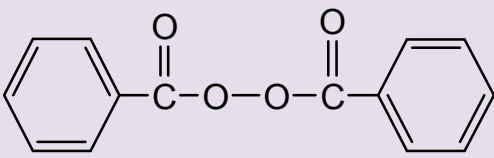
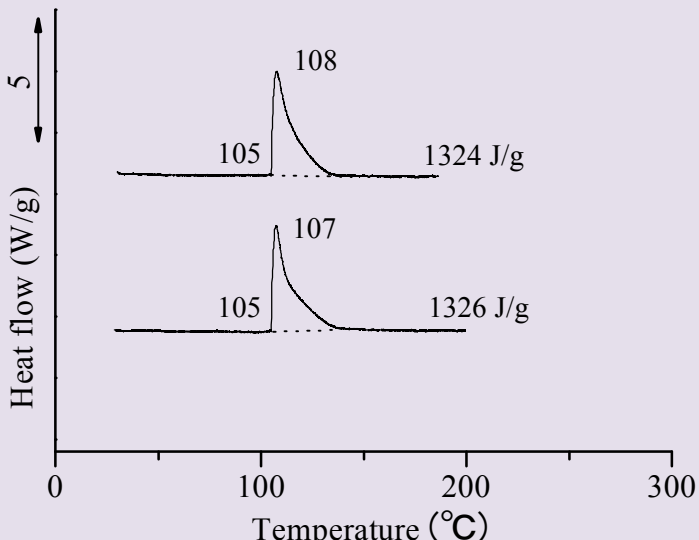
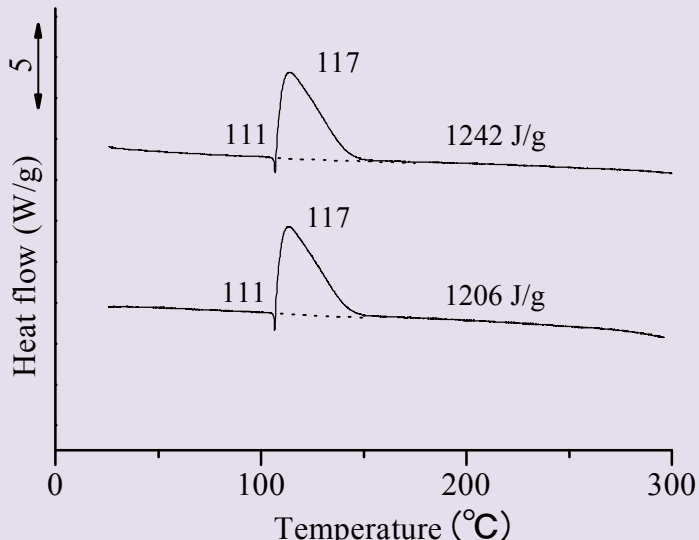
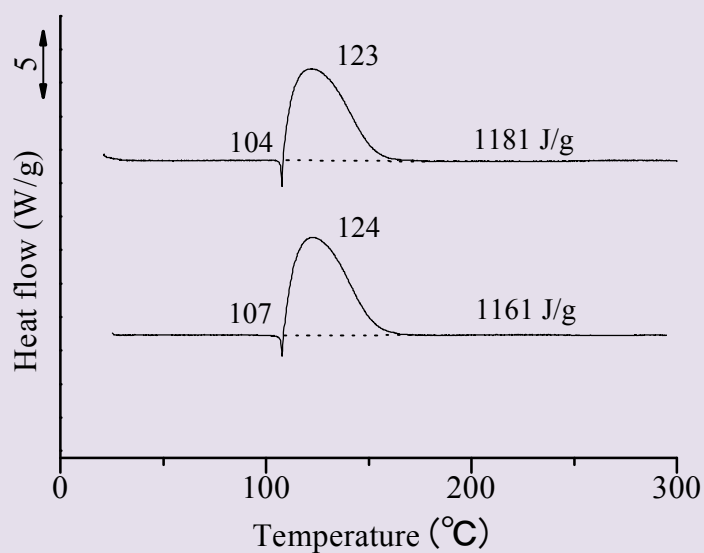


Benzoylperoxide	$(C_6H_5CO)_2O_2$ BPO
	DSC device: DSC8270B Rigaku Corp. dT/dt: 2, 5, 10, 20 K/min Atmosphere: Air Vesel: pressure vessel (SUS) Rigaku Corp. Sample: AlfaAesar (> 97%)
a) 2 K/min	AlfaAesar: AlfaAesar社 (販売 和光純薬工業株式会社)
	<Average> $T_a$ : 105 °C $T_o$ : 105 °C $T_{top}$ : 108 °C $Q_{DSC}$ : 1325 J/g
b) 5 K/min	
	<Average> $T_a$ : 111 °C $T_o$ : 111 °C $T_{top}$ : 117 °C $Q_{DSC}$ : 1224 J/g

c) 10 K/min



<Average>

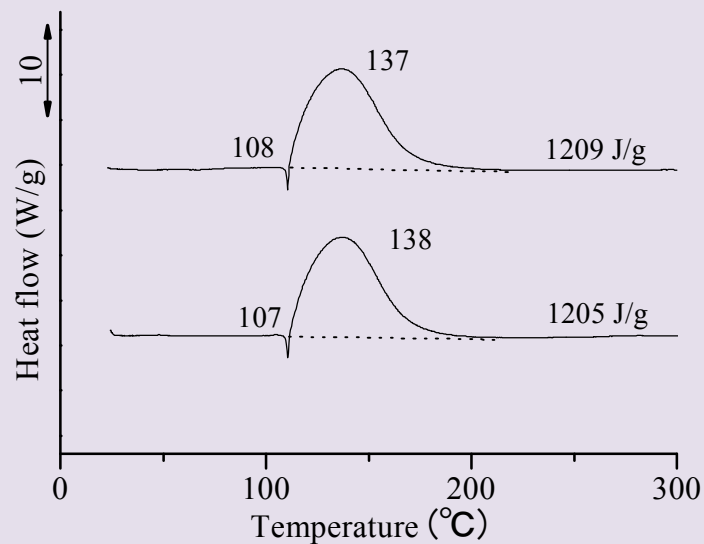
$T_a$  : 106 °C

$T_o$  : 106 °C

$T_{top}$  : 124 °C

$Q_{DSC}$  : 1173 J/g

d) 20 K/min



<Average>

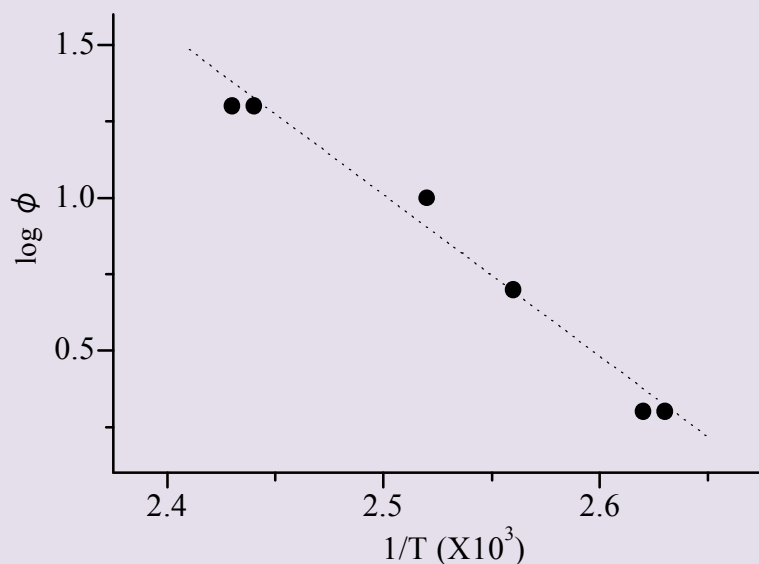
$T_a$  : 108 °C

$T_o$  : 108 °C

$T_{top}$  : 138 °C

$Q_{DSC}$  : 1207 J/g

### ASTM PLOT (2, 5, 10, 20 K/min)

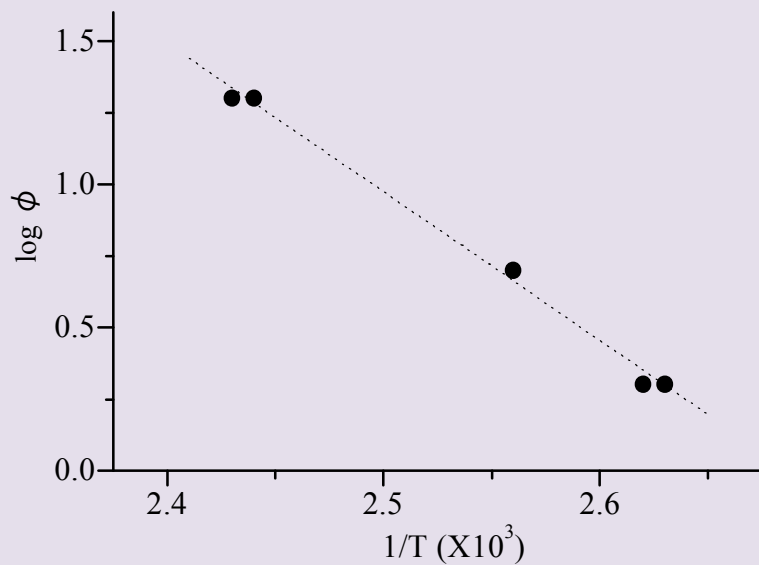


$\Delta E : 99 \text{ kJ/mol}$   
 $A : 2.52 \times 10^{17}$   
 $r : -0.98545$

Table (ASTM )

Heat rate $\phi$ (K/min)	$T_{\text{peak}}$ ( $^{\circ}\text{C}$ )	$T_m$ (K)	$1/T_m \cdot 10^3$	$\log \phi$
2	108	381	2.62	0.301
	107	380	2.63	0.301
5	117	390	2.56	0.699
	117	390	2.56	0.699
10	123	396	2.52	1.00
	124	397	2.52	1.00
20	137	410	2.44	1.30
	138	411	2.43	1.30

### ASTM PLOT (2, 5, 20 K/min)



$\Delta E$  : 97 kJ/mol

A :  $1.14 \times 10^{17}$

r : -0.9665

etc.