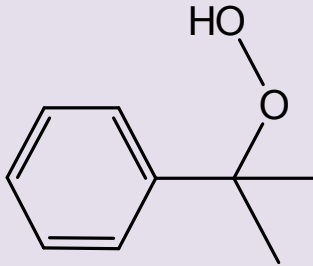
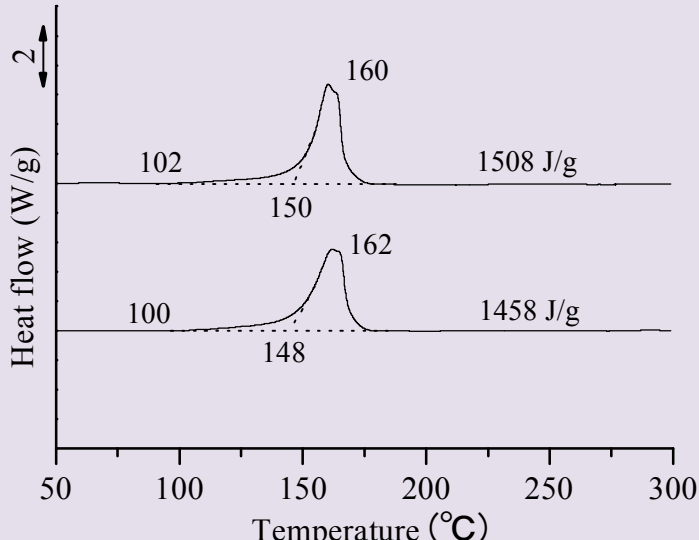
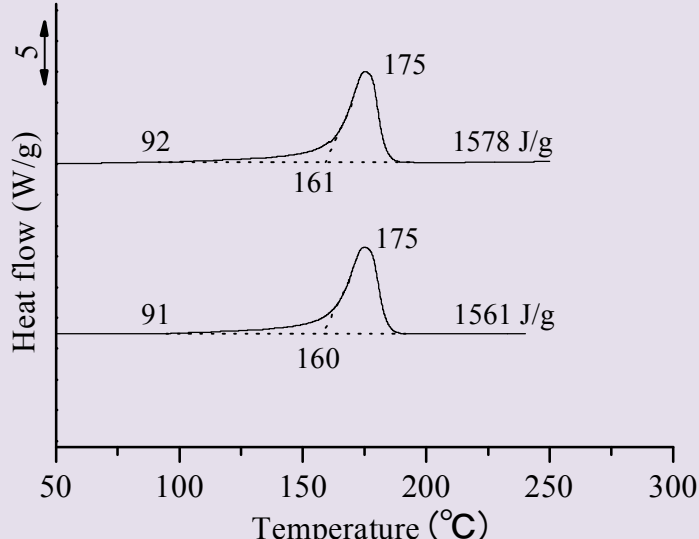
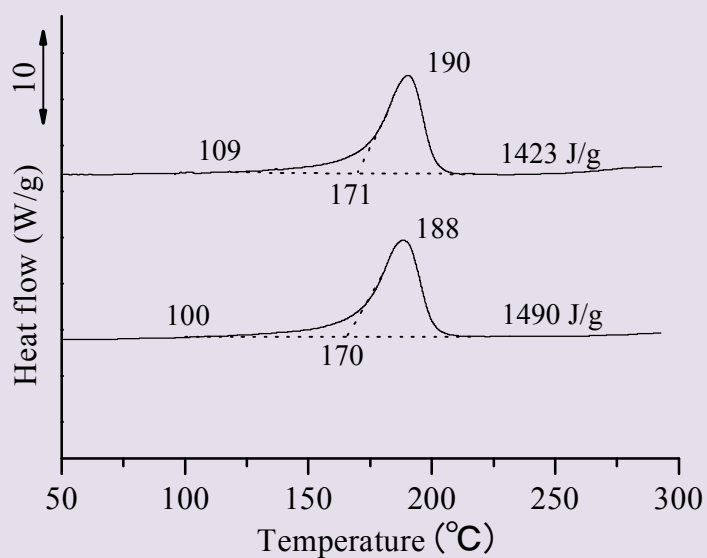


Cumene hydroperoxide	$C_6H_5C(CH_3)_2OOH$ CHP
 <p>+20% cumen</p>	DSC device: SII DSC 7020 SII Nano Technology Inc. dT/dt: 2, 5, 10, 20 K/min Atmosphere: Air Vesel: pressure vessel (SUS) SII Nano Technology Inc. Sample: AlfaAesar (> 80%)
a) 2 K/min <span style="float: right;">AlfaAesar: AlfaAesar社 (販売 和光純薬工業株式会社)</span>	
	<p>&lt;Average&gt;</p> <p><math>T_a</math>: 101 °C  <math>T_o</math>: 149 °C  <math>T_{top}</math>: 161 °C  <math>Q_{DSC}</math>: 1483 J/g</p>
b) 5 K/min	
	<p>&lt;Average&gt;</p> <p><math>T_a</math>: 92 °C  <math>T_o</math>: 161 °C  <math>T_{top}</math>: 175 °C  <math>Q_{DSC}</math>: 1570 J/g</p>

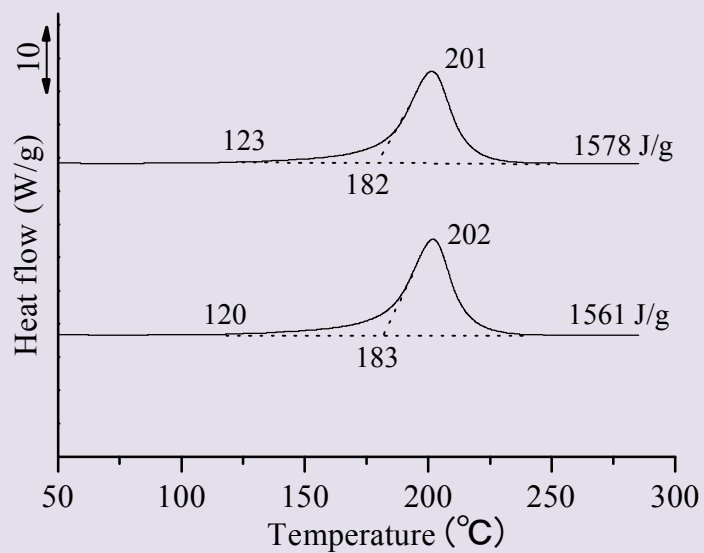
c) 10 K/min



< Average >

$T_a$  : 105 °C  
 $T_o$  : 171 °C  
 $T_{top}$  : 189 °C  
 $Q_{DSC}$  : 1457 J/g

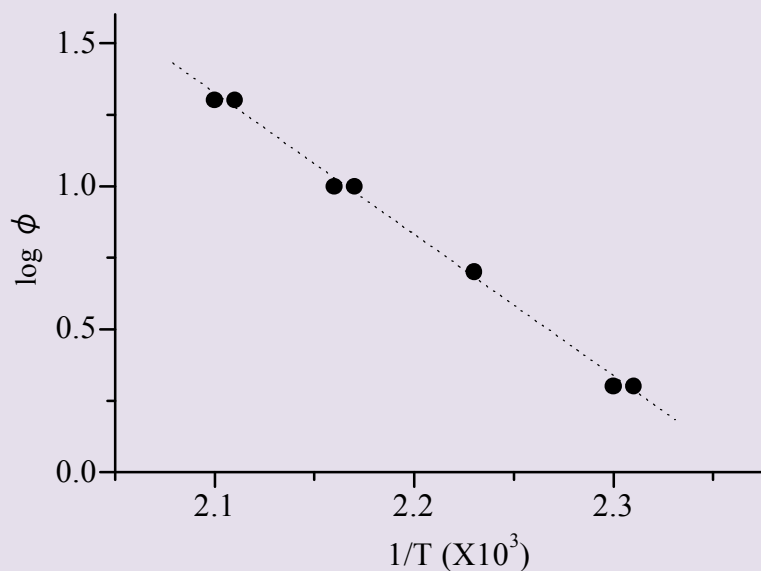
d) 20 K/min



< Average >

$T_a$  : 122 °C  
 $T_o$  : 183 °C  
 $T_{top}$  : 202 °C  
 $Q_{DSC}$  : 1570 J/g

## ASTM PLOT



$\Delta E$  : 92 kJ/mol  
 $A$  :  $1.82 \times 10^{16}$   
 $r$  : -0.99795

Heat rate $\phi$ (K/min)	$T_{\text{peak}}$ (°C)	$T_m$ (K)	$1/T_m \cdot 10^3$	$\log \phi$
2	160	433	2.31	0.301
	162	435	2.30	0.301
5	175	448	2.23	0.699
	175	448	2.23	0.699
10	190	463	2.16	1.00
	188	461	2.17	1.00
20	201	474	2.11	1.30
	202	475	2.10	1.30