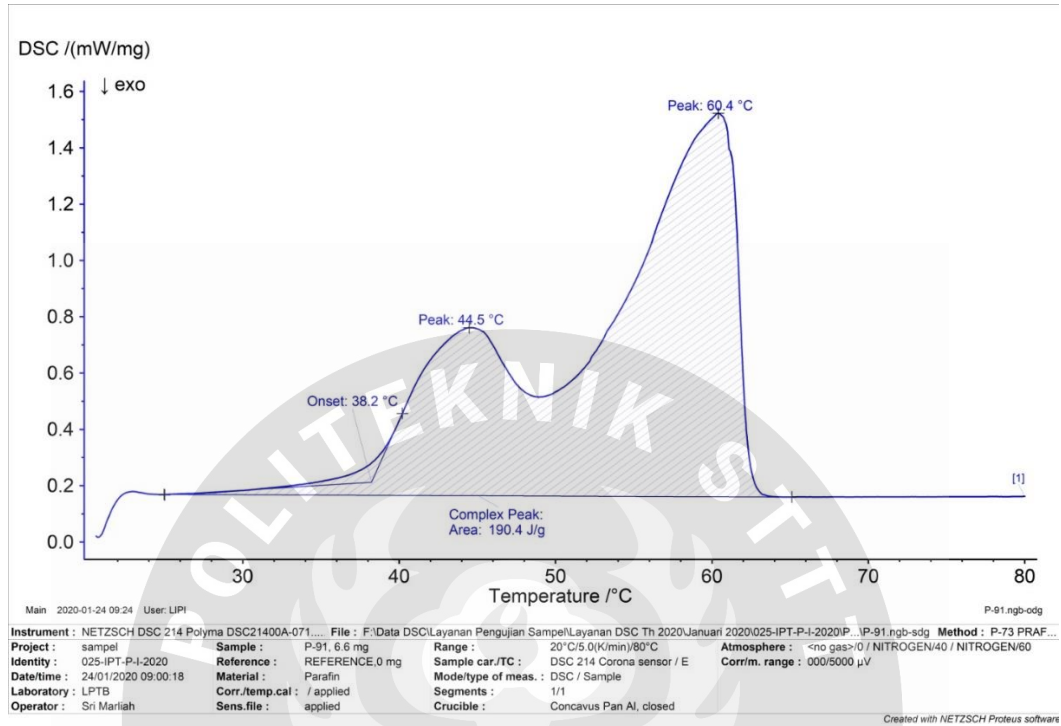


LAMPIRAN I

DATA PENGUKURAN DSC LILIN PARAFIN CAMPURAN PADAT DAN
CAIR 9 : 1

Instrument:	NETZSCH DSC 214 Polyma DSC21400A-0710-L	Sample name:	P-91
Project:	sampel	Sample Mass:	6.6 mg
Filename:	P-91.ngb-sdg	Crucible:	Concavus Pan Al, closed
Method used:	P-73 PRAFIN.ngb-s-dsc	Crucible Mass:	23.0 mg
Date/Time:	24/01/2020 09:00:18 (UTC+7)	Reference name:	REFERENCE
End Date/Time:	24/01/2020 09:12:20 (UTC+7)	Reference Mass:	0 mg
Laboratory:	LPTB	Reference Crucible M	23.1 mg
Operator:	Sri Marliah	Material:	Parafin
Measurement Type:	Sample	Sample determination	Manual
Temp.Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,	Atmosphere:	<no gas>/0 / NITROGEN40 / NITROGEN60
Sensitivity:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,	Segments:	1/1
Tau-R Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,	Range:	20°C/5.0(K/min)/80°C
Crucible:	Concavus Pan Al, closed	Corr/m. range:	000/5000
Sample Identity:	025-IPT-P-I-2020		

Remark:

Temperature °C	Time min	DSC mW/mg	Sensitivity μV/mW	Temperature °C	Time min	DSC mW/mg	Sensitivity μV/mW
20.5	0.0	-0.0119	3.368	50.5	6.1	0.5494	3.39
21.5	0.3	0.09231	3.369	51.5	6.3	0.5974	3.39
22.5	0.5	0.1742	3.37	52.5	6.5	0.6719	3.39
23.5	0.7	0.175	3.371	53.5	6.7	0.7656	3.391
24.5	0.9	0.1691	3.372	54.5	6.9	0.8602	3.391
25.5	1.1	0.1699	3.373	55.5	7.1	0.9745	3.391
26.5	1.3	0.1722	3.374	56.5	7.3	1.123	3.391
27.5	1.5	0.1738	3.375	57.5	7.5	1.268	3.391
28.5	1.7	0.1775	3.376	58.5	7.7	1.391	3.392
29.5	1.9	0.1813	3.377	59.5	7.9	1.473	3.392
30.5	2.1	0.1852	3.378	60.5	8.1	1.52	3.392
31.5	2.3	0.1905	3.379	61.5	8.3	1.218	3.392
32.5	2.5	0.1961	3.379	62.5	8.5	0.2596	3.392
33.5	2.7	0.2029	3.38	63.5	8.7	0.1645	3.392
34.5	2.9	0.2101	3.381	64.5	8.9	0.1599	3.392
35.5	3.1	0.2203	3.382	65.5	9.1	0.1601	3.392
36.5	3.3	0.2332	3.382	66.5	9.3	0.1596	3.392
37.5	3.5	0.2541	3.383	67.5	9.5	0.18	3.392
38.5	3.7	0.2937	3.384	68.5	9.7	0.1599	3.392
39.5	3.9	0.3725	3.384	69.5	9.9	0.1599	3.392
40.5	4.1	0.4938	3.385	70.5	10.1	0.1603	3.392
41.5	4.3	0.6053	3.386	71.5	10.3	0.1602	3.391
42.5	4.5	0.6807	3.386	72.5	10.5	0.1605	3.391
43.5	4.7	0.7342	3.387	73.5	10.7	0.1603	3.391
44.5	4.9	0.7613	3.387	74.5	10.9	0.1605	3.391
45.5	5.1	0.7401	3.388	75.5	11.1	0.1611	3.391
46.5	5.3	0.6475	3.388	76.5	11.3	0.1609	3.39
47.5	5.5	0.5605	3.388	77.5	11.5	0.1612	3.39
48.5	5.7	0.5187	3.389	78.5	11.7	0.1614	3.39
49.5	5.9	0.52	3.389	79.5	11.9	0.1617	3.389



Instrument:	NETZSCH DSC 214 DSC21400A-0710-L	Crucible:	Concavus Pan Al, closed
Project:	sampel	Sample identity:	025-IPT-P-I-2020
Filename:	P-91.ngb-sdg	Sample name:	P-91
Method used:	P-73 PRAFIN.ngb-s-dsc	Sample Mass:	6.6 mg
Date/Time:	24/01/2020 09:00:18 (UTC+7)	Crucible:	Concavus Pan Al, closed
End Date/Time:	24/01/2020 09:12:20 (UTC+7)	Crucible Mass:	23.0 mg
Laboratory:	LPTB	Reference name:	REFERENCE
Operator:	Sri Mariah	Reference Mass:	0 mg
Measurement Type:	Sample	Reference Crucible M	23.1 mg
Temp.Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,	Material:	Parafin
Sensitivity:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,	Sample determinator	Manual
Tau-R Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,		

Remark:

Furnace:	Arena DSC 214	Furnace TC:	E
Sample carrier:	DSC 214 Corona sensor	Sample TC:	E
Measurement End:	Normal end		

Protective: NITROGEN **Flow:** 60 ml/min **predefined**
Purge1: <no gas> **Flow:** 0 ml/min **predefined**
Purge2: NITROGEN **Flow:** 40 ml/min **predefined**

Start criteria
Temperature threshold: 5.0 K
Heating rate threshold: 0.100 K/min
Stabilization delay: 00:30 mm:ss
Preheating rate: 30.00 K/min
Maximum equilibrium time after preheating: 00:20 hh:mm
Precooling rate: 50.00 K/min
Maximum equilibrium time after precooling: 00:30 hh:mm

List of temperature steps:

Num	Mode	Temp. °C	HR K/min	Acq.Rate pts/min	Duration hh:mm	STC	P1	P2	PG	AC
---	Start	20.0				1a	0	1	1	1
1	Dynamic	80.0	5.000	150.00	00:12	1a	0	1	1	0
---	Emergency	90.0					0	0	1	0
---	Final stand-by heating	20.0	40.000		00:01	0a	0	0	1	1
---	Final stand-by isothermal	20.0			02:00	1a	0	0	1	1



Instrument:	NETZSCH DSC 214 Polyma DSC21400A-0710-L	Crucible:	Concavus Pan Al, closed
Project:	sampel	Sample Identity:	025-IPT-P-I-2020
Filename:	P-91.ngb-sdg	Sample name:	P-91
Method used:	P-73 PRAFIN.ngb-s-dsc	Sample Mass:	6.6 mg
Date/Time:	24/01/2020 09:00:18 (UTC+7)	Crucible:	Concavus Pan Al, closed
End Date/Time:	24/01/2020 09:12:20 (UTC+7)	Crucible Mass:	23.0 mg
Laboratory:	LPTB	Reference name:	REFERENCE
Operator:	Sri Marliah	Reference Mass:	0 mg
Measurement Type:	Sample	Reference Crucible M	23.1 mg
Temp.Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid, i	Material:	Parafin
Sensitivity:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid, i	Sample determinatio	Manual
Tau-R Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid, i	Atmosphere:	<no gas>0 / NITROGEN/40 / NITROGEN/60

Remark:

Segments: 1/1 : 20°C/5.0(K/min)/80°C

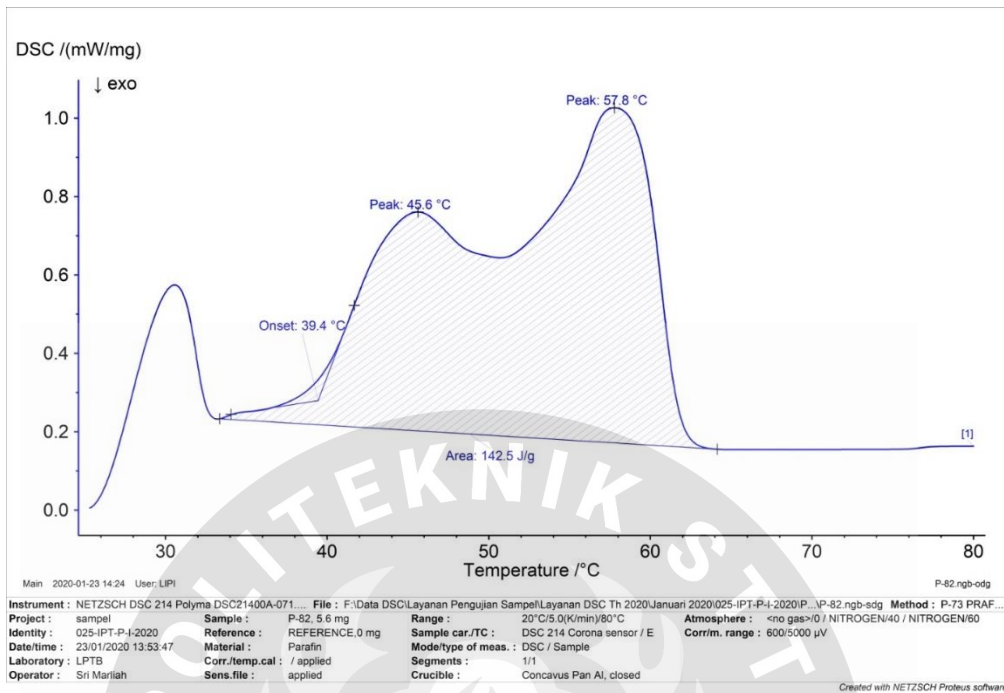
Parameters	Result	Range (min)	Range (max)
Peak (DSC)	60.4 °C	48.9 °C	65.1 °C
Complex Peak(ISO) (DSC),o		25.0 °C	65.1 °C
Area	190.4 J/g		
Peak (DSC)	44.5 °C	25.0 °C	48.9 °C
Onset (DSC)	38.2 °C	25.0 °C	44.4 °C



Created with NETZSCH Proteus software

LAMPIRAN II

DATA PENGUKURAN DSC LILIN PARAFIN CAMPURAN PADAT DAN CAIR 8 : 2



Instrument:	NETZSCH DSC 214 Polyma DSC21400A-0710-L	Sample name:	P-82
Project:	sampel	Sample Mass:	5.6 mg
Filename:	P-82.ngb-sdg	Crucible:	Concavus Pan Al, closed
Method used:	P-73 PRAFIN.ngb-s-dsc	Crucible Mass:	23.2 mg
Date/Time:	23/01/2020 13:53:47 (UTC+7)	Reference name:	REFERENCE
End Date/Time:	23/01/2020 14:05:48 (UTC+7)	Reference Mass:	0 mg
Laboratory:	LPTB	Reference Crucible M	23.1 mg
Operator:	Sri Marliah	Material:	Parafin
Measurement Type:	Sample	Sample determinator	Manual
Temp.Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,	Atmosphere:	<no gas>/0 / NITROGEN/40 / NITROGEN/60
Sensitivity:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,	Segments:	1/1
Tau-R Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,	Range:	20°C/5.0(K/min)/80°C
Crucible:	Concavus Pan Al, closed	Corr/m. range:	600/5000
Sample identity:	025-IPT-P-I-2020		

Remark:

Temperature °C	Time min	DSC mW/mg	Sensitivity µV/mW	Temperature °C	Time min	DSC mW/mg	Sensitivity µV/mW
25.2	0.0	0.007164	3.373	53.2	6.6	0.7149	3.39
26.2	1.8	0.02776	3.374	54.2	6.8	0.766	3.391
27.2	2.0	0.1463	3.375	55.2	7.0	0.8281	3.391
28.2	2.0	0.3252	3.376	56.2	7.2	0.9244	3.391
29.2	2.1	0.4935	3.377	57.2	7.4	1.016	3.391
30.2	2.2	0.5739	3.378	58.2	7.6	1.022	3.391
31.2	2.3	0.507	3.378	59.2	7.8	0.9602	3.392
32.2	2.5	0.3157	3.379	60.2	8.0	0.745	3.392
33.2	2.7	0.2325	3.38	61.2	8.2	0.3918	3.392
34.2	2.8	0.2452	3.381	62.2	8.4	0.2012	3.392
35.2	3.0	0.2517	3.381	63.2	8.6	0.1614	3.392
36.2	3.2	0.2573	3.382	64.2	8.8	0.1554	3.392
37.2	3.4	0.2694	3.383	65.2	9.0	0.1546	3.392
38.2	3.6	0.2886	3.384	66.2	9.2	0.1545	3.392
39.2	3.8	0.3213	3.384	67.2	9.4	0.1544	3.392
40.2	4.0	0.3787	3.385	68.2	9.6	0.1545	3.392
41.2	4.2	0.4697	3.385	69.2	9.8	0.1544	3.392
42.2	4.4	0.5785	3.386	70.2	10.0	0.1546	3.392
43.2	4.6	0.6671	3.386	71.2	10.2	0.1549	3.391
44.2	4.8	0.7247	3.387	72.2	10.4	0.155	3.391
45.2	5.0	0.7572	3.387	73.2	10.6	0.155	3.391
46.2	5.2	0.7535	3.388	74.2	10.8	0.1551	3.391
47.2	5.4	0.718	3.388	75.2	11.0	0.1554	3.391
48.2	5.6	0.6765	3.389	76.2	11.2	0.1667	3.39
49.2	5.8	0.6555	3.389	77.2	11.4	0.1612	3.39
50.2	6.0	0.6461	3.389	78.2	11.6	0.1628	3.39
51.2	6.2	0.6466	3.39	79.2	11.8	0.1632	3.389
52.2	6.4	0.6736	3.39				

Instrument:	NETZSCH DSC 214 DSC21400A-0710-L	Crucible:	Concavus Pan Al, closed
Project:	sampel	Sample identity:	025-IPT-P-I-2020
Filename:	P-82.ngb-sdg	Sample name:	P-82
Method used:	P-73 PRAFIN.ngb-s-dsc	Sample Mass:	5.6 mg
Date/Time:	23/01/2020 13:53:47 (UTC+7)	Crucible:	Concavus Pan Al, closed
End Date/Time:	23/01/2020 14:05:48 (UTC+7)	Crucible Mass:	23.2 mg
Laboratory:	LPTB	Reference name:	REFERENCE
Operator:	Sri Marliah	Reference Mass:	0 mg
Measurement Type:	Sample	Reference Crucible M	23.1 mg
Temp.Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,	Material:	Parafin
Sensitivity:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,	Sample determinator	Manual
Tau-R Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,		

Remark:

Furnace:	Arena DSC 214	Furnace TC:	E
Sample carrier:	DSC 214 Corona sensor	Sample TC:	E
Measurement End:	Normal end		

Protective: NITROGEN Flow: 60 ml/min predefined
Purge1: <no gas> Flow: 0 ml/min predefined
Purge2: NITROGEN Flow: 40 ml/min predefined

Start criteria
Temperature threshold: 5.0 K
Heating rate threshold: 0.100 K/min
Stabilization delay: 00:30 mm:ss
Preheating rate: 30.00 K/min
Maximum equilibrium time after preheating: 00:20 hh:mm
Precooling rate: 50.00 K/min
Maximum equilibrium time after precooling: 00:30 hh:mm

List of temperature steps:

Num	Mode	Temp. °C	HR K/min	Acq.Rate pts/min	Duration hh:mm	STC	P1	P2	PG	AC
---	Start	20.0				1a	0	1	1	1
1	Dynamic	80.0	5.000	150.00	00:12	1a	0	1	1	0
---	Emergency	90.0					0	0	1	0
---	Final stand-by heating	20.0	40.000		00:01	0a	0	0	1	1
---	Final stand-by isothermal	20.0			02:00	1a	0	0	1	1

Instrument:	NETZSCH DSC 214 Polyma DSC21400A-0710-L	Crucible:	Concavus Pan Al, closed
Project:	sampel	Sample Identity:	025-IPT-P-I-2020
Filename:	P-82.ngb-sdg	Sample name:	P-82
Method used:	P-73 PRAFIN.ngb-s-dsc	Sample Mass:	5.6 mg
Date/Time:	23/01/2020 13:53:47 (UTC+7)	Crucible:	Concavus Pan Al, closed
End Date/Time:	23/01/2020 14:05:48 (UTC+7)	Crucible Mass:	23.2 mg
Laboratory:	LPTB	Reference name:	REFERENCE
Operator:	Sri Marliah	Reference Mass:	0 mg
Measurement Type:	Sample	Reference Crucible M	23.1 mg
Temp.Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid, i	Material:	Parafin
Sensitivity:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid, i	Sample determinatio	Manual
Tau-R Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid, i	Atmosphere:	<no gas>/0 / NITROGEN/40 / NITROGEN/60

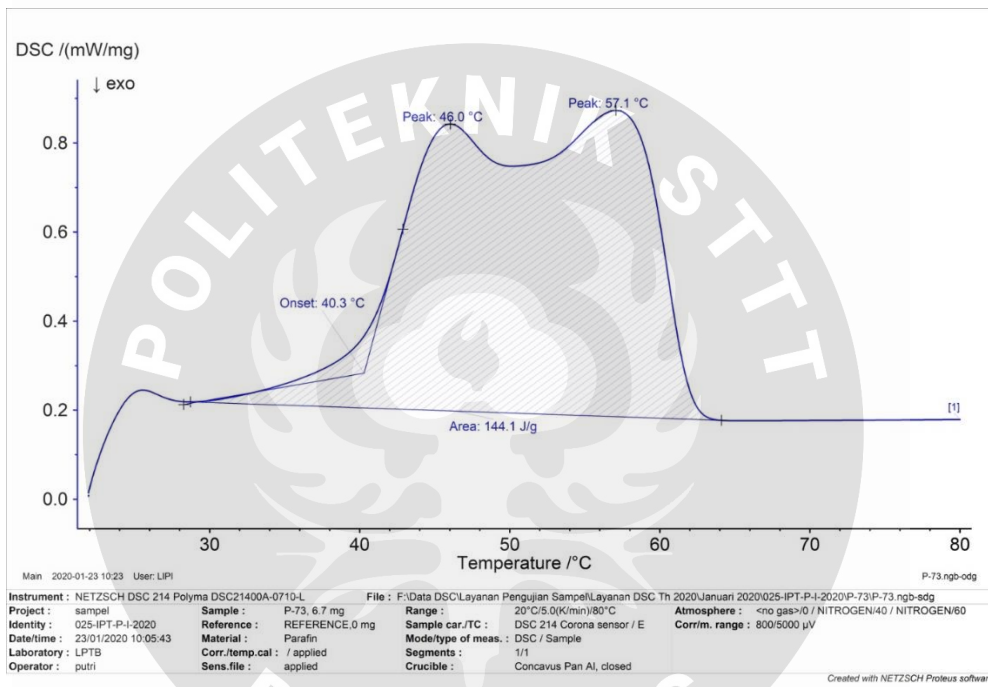
Remark:

Segments: 1/1 : 20°C/5.0(K/min)/80°C

Parameters	Result	Range (min)	Range (max)
Peak (DSC)	57.8 °C	49.9 °C	62.0 °C
Peak (DSC)	45.6 °C	38.7 °C	49.9 °C
Area (DSC),o	142.5 J/g	33.4 °C	64.2 °C
Onset (DSC)	39.4 °C	34.1 °C	45.6 °C



LAMPRAN III
DATA PENGUKURAN DSC LILIN PARAFIN CAMPURAN PADAT DAN
CAIR 7 : 3



Instrument:	NETZSCH DSC 214 Polyma DSC21400A-0710-L	Sample name:	P-73
Project:	sampel	Sample Mass:	6.7 mg
Filename:	P-73.ngb-sdg	Crucible:	Concavus Pan Al, closed
Method used:	new measurement	Crucible Mass:	22.9 mg
Date/Time:	23/01/2020 10:05:43 (UTC+7)	Reference name:	REFERENCE
End Date/Time:	23/01/2020 10:17:45 (UTC+7)	Reference Mass:	0 mg
Laboratory:	LPTB	Reference Crucible M	23.1 mg
Operator:	putri	Material:	Parafin
Measurement Type:	Sample	Sample determination	Manual
Temp.Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,	Atmosphere:	<no gas>/0 / NITROGEN/40 / NITROGEN/60
Sensitivity:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,	Segments:	1/1
Tau-R Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,	Range:	20°C/5.0(K/min)/80°C
Crucible:	Concavus Pan Al, closed	Corr/m. range:	800/5000
Sample identity:	025-IPT-P-I-2020		

Remark:

Temperature °C	Time min	DSC mW/mg	Sensitivity µV/mW	Temperature °C	Time min	DSC mW/mg	Sensitivity µV/mW
21.8	0.0	0.000002019	3.37	51.8	6.4	0.7543	3.39
22.8	0.7	0.1025	3.371	52.8	6.6	0.7664	3.39
23.8	0.9	0.1892	3.372	53.8	6.8	0.7899	3.391
24.8	1.0	0.2365	3.373	54.8	7.0	0.8228	3.391
25.8	1.2	0.2436	3.374	55.8	7.2	0.8542	3.391
26.8	1.4	0.2303	3.375	56.8	7.4	0.8722	3.391
27.8	1.6	0.2206	3.375	57.8	7.6	0.8633	3.391
28.8	1.8	0.2186	3.376	58.8	7.8	0.8029	3.392
29.8	2.0	0.2209	3.377	59.8	8.0	0.6572	3.392
30.8	2.2	0.2254	3.378	60.8	8.2	0.441	3.392
31.8	2.4	0.2314	3.379	61.8	8.4	0.2637	3.392
32.8	2.6	0.2387	3.38	62.8	8.6	0.192	3.392
33.8	2.8	0.2473	3.38	63.8	8.8	0.178	3.392
34.8	3.0	0.257	3.381	64.8	9.0	0.1765	3.392
35.8	3.2	0.2682	3.382	65.8	9.2	0.1764	3.392
36.8	3.4	0.2813	3.383	66.8	9.4	0.1764	3.392
37.8	3.6	0.2969	3.383	67.8	9.6	0.1766	3.392
38.8	3.8	0.317	3.384	68.8	9.8	0.1768	3.392
39.8	4.0	0.3466	3.385	69.8	10.0	0.177	3.392
40.8	4.2	0.3966	3.385	70.8	10.2	0.1771	3.391
41.8	4.4	0.4815	3.386	71.8	10.4	0.1773	3.391
42.8	4.6	0.6	3.386	72.8	10.6	0.1774	3.391
43.8	4.8	0.7204	3.387	73.8	10.8	0.1777	3.391
44.8	5.0	0.806	3.387	74.8	11.0	0.1779	3.391
45.8	5.2	0.8417	3.388	75.8	11.2	0.1781	3.39
46.8	5.4	0.8297	3.388	76.8	11.4	0.1783	3.39
47.8	5.6	0.7919	3.389	77.8	11.6	0.1785	3.39
48.8	5.8	0.7602	3.389	78.8	11.8	0.1788	3.39
49.8	6.0	0.7486	3.389	79.8	12.0	0.179	3.389
50.8	6.2	0.7493	3.39				

Instrument:	NETZSCH DSC 214 DSC21400A-0710-L	Crucible:	Concavus Pan Al, closed
Project:	sampel	Sample Identity:	025-IPT-P-1-2020
Filename:	P-73.ngb-sdg	Sample name:	P-73
Method used:	new measurement	Sample Mass:	6.7 mg
Date/Time:	23/01/2020 10:05:43 (UTC+7)	Crucible:	Concavus Pan Al, closed
End Date/Time:	23/01/2020 10:17:45 (UTC+7)	Crucible Mass:	22.9 mg
Laboratory:	LPTB	Reference name:	REFERENCE
Operator:	putri	Reference Mass:	0 mg
Measurement Type:	Sample	Reference Crucible M	23.1 mg
Temp.Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,	Material:	Parafin
Sensitivity:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,	Sample determination	Manual
Tau-R Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,		

Remark:

Furnace:	Arena DSC 214	Furnace TC:	E
Sample carrier:	DSC 214 Corona sensor	Sample TC:	E
Measurement End:	Normal end		

Protective: NITROGEN Flow: 60 ml/min predefined
Purge1: <no gas> Flow: 0 ml/min predefined
Purge2: NITROGEN Flow: 40 ml/min predefined

Start criteria
Temperature threshold: 5.0 K
Heating rate threshold: 0.100 K/min
Stabilization delay: 00:30 mm:ss
Preheating rate: 30.00 K/min
Maximum equilibrium time after preheating: 00:20 hh:mm
Precooling rate: 50.00 K/min
Maximum equilibrium time after precooling: 00:30 hh:mm

List of temperature steps:

Num	Mode	Temp. °C	HR K/min	Acq.Rate pts/min	Duration hh:mm	STC	P1	P2	PG	AC
---	Start	20.0				1a	0	1	1	1
1	Dynamic	80.0	5.000	150.00	00:12	1a	0	1	1	0
---	Emergency	90.0					0	0	1	0
---	Final stand-by heating	20.0	40.000		00:01	0a	0	0	1	1
---	Final stand-by isothermal	20.0			02:00	1a	0	0	1	1

Instrument:	NETZSCH DSC 214 Polyma DSC21400A-0710-L	Crucible:	Concavus Pan Al, closed
Project:	sampel	Sample Identity:	025-IPT-P-I-2020
Filename:	P-73.ngb-sdg	Sample name:	P-73
Method used:	new measurement	Sample Mass:	6.7 mg
Date/Time:	23/01/2020 10:05:43 (UTC+7)	Crucible:	Concavus Pan Al, closed
End Date/Time:	23/01/2020 10:17:45 (UTC+7)	Crucible Mass:	22.9 mg
Laboratory:	LPTB	Reference name:	REFERENCE
Operator:	putri	Reference Mass:	0 mg
Measurement Type:	Sample	Reference Crucible N	23.1 mg
Temp.Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid, i	Material:	Parafin
Sensitivity:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid, i	Sample determinatio	Manual
Tau-R Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid, i	Atmosphere:	<no gas>/0 / NITROGEN/40 / NITROGEN/60

Remark:

Segments: 1/1 : 20°C/5.0(K/min)/80°C

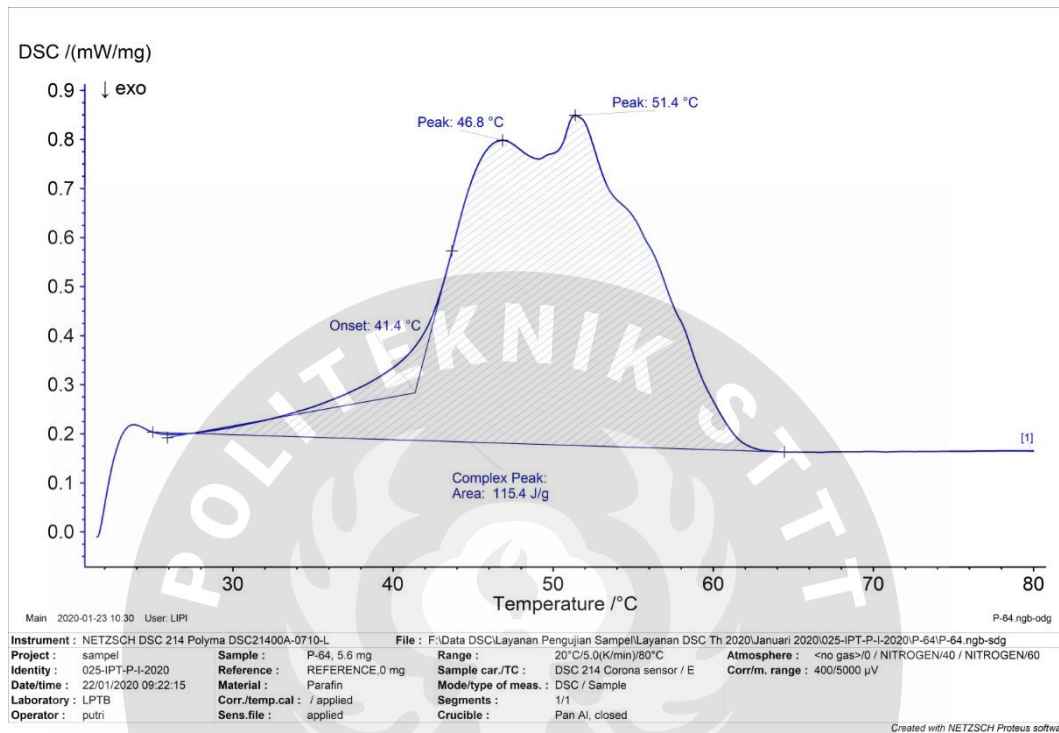
Parameters	Result	Range (min)	Range (max)
Peak (DSC)	57.1 °C	49.8 °C	63.1 °C
Peak (DSC)	46.0 °C	39.1 °C	49.8 °C
Area (DSC),o	144.1 J/g	28.7 °C	64.1 °C
Onset (DSC)	40.3 °C	28.3 °C	46.0 °C



LAMPRAN IV

DATA PENGUKURAN DSC LILIN PARAFIN CAMPURAN PADAT DAN

CAIR 6 : 4



Instrument:	NETZSCH DSC 214 Polyma DSC21400A-0710-L	Sample name:	P-64
Project:	sample	Sample Mass:	5.6 mg
Filename:	P-64.ngb-sdg	Crucible:	Pan Al, closed
Method used:	new measurement	Crucible Mass:	23.7 mg
Date/Time:	22/01/2020 09:22:15 (UTC+7)	Reference name:	REFERENCE
End Date/Time:	22/01/2020 09:34:17 (UTC+7)	Reference Mass:	0 mg
Laboratory:	LPTB	Reference Crucible M	23.1 mg
Operator:	putri	Material:	Parafin
Measurement Type:	Sample	Sample determination	Manual
Temp. Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,	Atmosphere:	<no gas>/0 / NITROGEN/40 / NITROGEN/60
Sensitivity:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,	Segments:	1/1
Tau-R Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,	Range:	20°C/5.0(K/min)/80°C
Crucible:	Pan Al, closed	Corr/m. range:	400/5000
Sample identity:	025-IPT-P-I-2020		

Remark:

Temperature °C	Time min	DSC mW/mg	Sensitivity μV/mW	Temperature °C	Time min	DSC mW/mg	Sensitivity μV/mW
21.4	0.0	0.006385	3.369	51.4	6.3	0.8491	3.39
22.4	0.5	0.1123	3.37	52.4	6.5	0.7996	3.39
23.4	0.7	0.2128	3.371	53.4	6.7	0.7041	3.39
24.4	0.9	0.2118	3.372	54.4	6.9	0.6647	3.391
25.4	1.1	0.2003	3.373	55.4	7.1	0.6207	3.391
26.4	1.3	0.199	3.374	56.4	7.3	0.5579	3.391
27.4	1.5	0.2009	3.375	57.4	7.5	0.4701	3.391
28.4	1.7	0.2051	3.376	58.4	7.7	0.3963	3.392
29.4	1.9	0.2102	3.377	59.4	7.9	0.3053	3.392
30.4	2.1	0.2164	3.378	60.4	8.1	0.2433	3.392
31.4	2.3	0.2233	3.379	61.4	8.3	0.1949	3.392
32.4	2.5	0.2305	3.379	62.4	8.5	0.1724	3.392
33.4	2.7	0.2391	3.38	63.4	8.7	0.1649	3.392
34.4	2.9	0.2486	3.381	64.4	8.9	0.163	3.392
35.4	3.1	0.2594	3.382	65.4	9.1	0.1627	3.392
36.4	3.3	0.2719	3.382	66.4	9.3	0.1625	3.392
37.4	3.5	0.286	3.383	67.4	9.5	0.1632	3.392
38.4	3.7	0.3018	3.384	68.4	9.7	0.1634	3.392
39.4	3.9	0.3214	3.384	69.4	9.9	0.1637	3.392
40.4	4.1	0.3447	3.385	70.4	10.1	0.1635	3.392
41.4	4.3	0.3784	3.385	71.4	10.3	0.1637	3.391
42.4	4.5	0.4356	3.386	72.4	10.5	0.1638	3.391
43.4	4.7	0.5369	3.387	73.4	10.7	0.164	3.391
44.4	4.9	0.6618	3.387	74.4	10.9	0.1643	3.391
45.4	5.1	0.7538	3.388	75.4	11.1	0.1643	3.391
46.4	5.3	0.7945	3.388	76.4	11.3	0.1648	3.39
47.4	5.5	0.7923	3.388	77.4	11.5	0.1651	3.39
48.4	5.7	0.7684	3.389	78.4	11.7	0.1654	3.39
49.4	5.9	0.7635	3.389	79.4	11.9	0.1654	3.389
50.4	6.1	0.7804	3.39				

Instrument:	NETZSCH DSC 214 DSC21400A-0710-L	Crucible:	Pan Al, closed
Project:	sampel	Sample identity:	025-IPT-P-I-2020
Filename:	P-64.ngb-sdg	Sample name:	P-64
Method used:	new measurement	Sample Mass:	5.6 mg
Date/Time:	22/01/2020 09:22:15 (UTC+7)	Crucible:	Pan Al, closed
End Date/Time:	22/01/2020 09:34:17 (UTC+7)	Crucible Mass:	23.7 mg
Laboratory:	LPTB	Reference name:	REFERENCE
Operator:	putri	Reference Mass:	0 mg
Measurement Type:	Sample	Reference Crucible M	23.1 mg
Temp.Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,	Material:	Parafin
Sensitivity:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,	Sample determinator	Manual
Tau-R Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid,		

Remark:

Furnace:	Arena DSC 214	Furnace TC:	E
Sample carrier:	DSC 214 Corona sensor	Sample TC:	E
Measurement End:	Normal end		

Protective: NITROGEN **Flow:** 60 ml/min **predefined**
Purge1: <no gas> **Flow:** 0 ml/min **predefined**
Purge2: NITROGEN **Flow:** 40 ml/min **predefined**

Start criteria

Temperature threshold: 5.0 K
Heating rate threshold: 0.100 K/min
Stabilization delay: 00:30 mm:ss
Preheating rate: 30.00 K/min
Maximum equilibrium time after preheating: 00:20 hh:mm
Precooling rate: 50.00 K/min
Maximum equilibrium time after precooling: 00:30 hh:mm

List of temperature steps:

Num	Mode	Temp. °C	HR K/min	Acq.Rate pts/min	Duration hh:mm	STC	P1	P2	PG	AC
---	Start	20.0				1a	0	1	1	1
1	Dynamic	80.0	5.000	150.00	00:12	1a	0	1	1	0
---	Emergency	90.0					0	0	1	0
---	Final stand-by heating	20.0	40.000		00:01	0a	0	0	1	1
---	Final stand-by isothermal	20.0			02:00	1a	0	0	1	1



Instrument:	NETZSCH DSC 214 Polyma DSC21400A-0710-L	Crucible:	Pan Al, closed
Project:	sampel	Sample identity:	025-IPT-P-I-2020
Filename:	P-64.ngb-sdg	Sample name:	P-64
Method used:	new measurement	Sample Mass:	5.6 mg
Date/Time:	22/01/2020 09:22:15 (UTC+7)	Crucible:	Pan Al, closed
End Date/Time:	22/01/2020 09:34:17 (UTC+7)	Crucible Mass:	23.7 mg
Laboratory:	LPTB	Reference name:	REFERENCE
Operator:	putri	Reference Mass:	0 mg
Measurement Type:	Sample	Reference Crucible #	23.1 mg
Temp. Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid, i	Material:	Parafin
Sensitivity:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid, i	Sample determinatio	Manual
Tau-R Calib.:	<-100 °C... 550 °C>, Crucible: Pan Al, pierced lid, i	Atmosphere:	<no gas>/0 / NITROGEN/40 / NITROGEN/60

Remark:

Segments: 1/1 : 20°C/5.0(K/min)/80°C

Parameters	Result	Range (min)	Range (max)
Peak (DSC)	51.4 °C	49.1 °C	64.4 °C
Complex Peak(ISO) (DSC),o		25.0 °C	64.4 °C
Area	115.4 J/g		
Peak (DSC)	46.8 °C	40.1 °C	49.1 °C
Onset (DSC)	41.4 °C	25.9 °C	46.7 °C

