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LAMPIRAN

Lampiran 1 Dokumentasi Kegiatan penelitiain



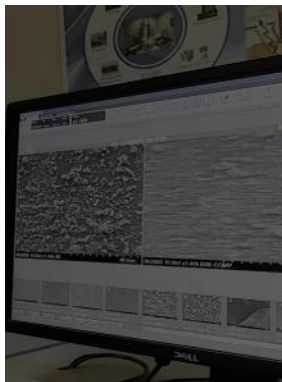
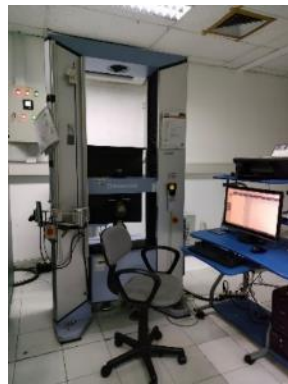
Penimbangan Bahan



Pencampuran bahan



Hasil Extruder berupa pelet



Proses pengujian dan karakterisasi Karakterisasi

Lampiran 2 Hasil Uji Densitas

TPS = 70gr pati + 30gr Gliserol + 0gr Lignin											
Berat pikno kosong	Berat pikno + sampel	Berat sampel	Berat pikno + sampel + cairan	Berat cairan yang ada sampel	Berat pikno + cairan	Berat cairan tanpa sampel	Volume pikno	Volume cairan dlm (picno+sampel+cairan)	Volume sampel	Density	Specific Gravity
15,3873	15,6028	0,2155	23,6866	8,0838	23,5883	8,2010	10,3980	10,2494	0,1486	1,4502	1,8387
15,3873	15,6037	0,2164	23,6870	8,0833	23,5883	8,2010	10,3980	10,2488	0,1492	1,4501	1,8386
15,3873	15,6029	0,2156	23,6867	8,0838	23,5883	8,2010	10,3980	10,2494	0,1486	1,4509	1,8396
15,3873	15,6043	0,2170	23,6878	8,0835	23,5883	8,2010	10,3980	10,2490	0,1490	1,4566	1,8468
15,3873	15,6042	0,2169	23,6873	8,0831	23,5883	8,2010	10,3980	10,2485	0,1495	1,4510	1,8397
									average	1,4518	1,8407
									standar deviasi	0,0027	0,0035
TPSL 1 = 70gr pati + 30gr Gliserol + 1gr Lignin											
Berat pikno kosong	Berat pikno + sampel	Berat sampel	Berat pikno + sampel + cairan	Berat cairan yang ada sampel	Berat pikno + cairan	Berat cairan tanpa sampel	Volume pikno	Volume cairan dlm (picno+sampel+cairan)	Volume sampel	Density	Specific Gravity
15,3873	15,6084	0,2211	23,6522	8,0438	23,5883	8,2010	10,3980	10,1987	0,1993	1,1093	1,4065
15,3873	15,6111	0,2238	23,6566	8,0455	23,5883	8,2010	10,3980	10,2008	0,1972	1,1351	1,4392
15,3873	15,6104	0,2231	23,6559	8,0455	23,5883	8,2010	10,3980	10,2008	0,1972	1,1316	1,4347
15,3873	15,6110	0,2237	23,6564	8,0454	23,5883	8,2010	10,3980	10,2007	0,1973	1,1339	1,4377
15,3873	15,6114	0,2241	23,6573	8,0459	23,5883	8,2010	10,3980	10,2013	0,1967	1,1396	1,4449
									average	1,1299	1,4326
									standar deviasi	0,0119	0,0151

TPSL 2 = 70gr pati + 30gr Gliserol + 2gr Lignin

Berat pikno kosong	Berat pikno + sampel	Berat sampel	Berat pikno + sampel + cairan	Berat cairan yang ada sampel	Berat pikno + cairan	Berat cairan tanpa sampel	Volume pikno	Volume cairan dlm (picno+sampel+cairan)	Volume sampel	Density	Specific Gravity
15,3873	15,6103	0,2230	23,6535	8,0432	23,5883	8,2010	10,3980	10,1979	0,2001	1,1146	1,4132
15,3873	15,6101	0,2228	23,6532	8,0431	23,5883	8,2010	10,3980	10,1978	0,2002	1,1129	1,4110
15,3873	15,6097	0,2224	23,6526	8,0429	23,5883	8,2010	10,3980	10,1975	0,2005	1,1095	1,4067
15,3873	15,6094	0,2221	23,6523	8,0429	23,5883	8,2010	10,3980	10,1975	0,2005	1,1080	1,4048
15,3873	15,6092	0,2219	23,6520	8,0428	23,5883	8,2010	10,3980	10,1974	0,2006	1,1063	1,4027
average										1,1102	1,4077
standar deviasi										0,0034	0,0044

TPSL 5 = 70gr pati + 30gr Gliserol + 5gr Lignin

Berat pikno kosong	Berat pikno + sampel	Berat sampel	Berat pikno + sampel + cairan	Berat cairan yang ada sampel	Berat pikno + cairan	Berat cairan tanpa sampel	Volume pikno	Volume cairan dlm (picno+sampel+cairan)	Volume sampel	Density	Specific Gravity
15,3873	15,5910	0,2037	23,6974	8,1064	23,5883	8,2010	10,3980	10,2781	0,1199	1,6983	2,1533
15,3873	15,5907	0,2034	23,6962	8,1055	23,5883	8,2010	10,3980	10,2769	0,1211	1,6798	2,1298
15,3873	15,5909	0,2036	23,6968	8,1059	23,5883	8,2010	10,3980	10,2774	0,1206	1,6886	2,1409
15,3873	15,5905	0,2032	23,6957	8,1052	23,5883	8,2010	10,3980	10,2765	0,1215	1,6729	2,1211
15,3873	15,5902	0,2029	23,6949	8,1047	23,5883	8,2010	10,3980	10,2759	0,1221	1,6618	2,1070
average										1,6803	2,1304
standar deviasi										0,0141	0,0178

TPSL 10 = 70gr pati + 30gr Gliserol + 10gr Lignin											
Berat pikno kosong	Berat pikno + sampel	Berat sampel	Berat pikno + sampel + cairan	Berat cairan yang ada sampel	Berat pikno + cairan	Berat cairan tanpa sampel	Volume pikno	Volume cairan dlm (picno+sampel+cairan)	Volume sampel	Density	Specific Gravity
15,3873	15,6156	0,2283	23,6740	8,0584	23,5883	8,2010	10,3980	10,2172	0,1808	1,2627	1,6010
15,3873	15,6148	0,2275	23,6723	8,0575	23,5883	8,2010	10,3980	10,2161	0,1819	1,2504	1,5854
15,3873	15,6162	0,2289	23,6764	8,0602	23,5883	8,2010	10,3980	10,2195	0,1785	1,2822	1,6257
15,3873	15,6152	0,2279	23,6737	8,0585	23,5883	8,2010	10,3980	10,2173	0,1807	1,2614	1,5993
15,3873	15,6146	0,2273	23,6715	8,0569	23,5883	8,2010	10,3980	10,2153	0,1827	1,2441	1,5774
									average	1,2602	1,5977
									standar deviasi	0,0146	0,0185

TPSL 20 = 70gr pati + 30gr Gliserol + 20gr Lignin											
Berat pikno kosong	Berat pikno + sampel	Berat sampel	Berat pikno + sampel + cairan	Berat cairan yang ada sampel	Berat pikno + cairan	Berat cairan tanpa sampel	Volume pikno	Volume cairan dlm (picno+sampel+cairan)	Volume sampel	Density	Specific Gravity
15,3873	15,6103	0,2230	23,6947	8,0844	23,5883	8,2010	10,3980	10,2502	0,1478	1,5084	1,9125
15,3873	15,6096	0,2223	23,6927	8,0831	23,5883	8,2010	10,3980	10,2485	0,1495	1,4871	1,8855
15,3873	15,6098	0,2225	23,6935	8,0837	23,5883	8,2010	10,3980	10,2493	0,1487	1,4961	1,8968
15,3873	15,6108	0,2235	23,6959	8,0851	23,5883	8,2010	10,3980	10,2511	0,1469	1,5209	1,9284
15,3873	15,6105	0,2232	23,6952	8,0847	23,5883	8,2010	10,3980	10,2505	0,1475	1,5137	1,9192
									average	1,5052	1,9085
									standar deviasi	0,0136	0,0173