Lampiran 1. Hasil Analisa Normalitas

a. Uji Mikrobiologi

Tests of Normality

	Kolmogorov-Smirnov(a)			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
mikro	,097	42	,200(*)	,948	42	,056

* This is a lower bound of the true significance.
a Lilliefors Significance Correction

b. Uji Kimia

– Aw

Tests of Normality

		Kolmogorov-Smirnov(a)			Shapiro-Wilk		
	sampel	Statistic	df	Sig.	Statistic	df	Sig.
aw	PET/LLDPE hari ke 1	,168	6	,200(*)	,981	6	,954
	OPP/CPPmet hari ke 1	,190	6	,200(*)	,934	6	,614
	PET/PE/Al/LLDPE hari ke 1	,245	6	,200(*)	,877	6	,256
	PET/LLDPE hari ke 5	,204	6	,200(*)	,955	6	,783
	OPP/CPPmet hari ke 5	,177	6	,200(*)	,928	6	,564
	PET/PE/Al/LLDPE hari ke 5	,249	6	,200(*)	,912	6	,448
	PET/LLDPE hari ke 10	,117	6	,200(*)	,996	6	,998
	OPP/CPPmet hari ke 10	,176	6	,200(*)	,955	6	,783
	PET/PE/Al/LLDPE hari ke 10	,235	6	,200(*)	,854	6	,169
	PET/LLDPE hari ke 15	,206	6	,200(*)	,964	6	,853
	OPP/CPPmet hari ke 15	,247	6	,200(*)	,852	6	,164
	PET/PE/Al/LLDPE hari ke 15	,181	6	,200(*)	,904	6	,400
	PET/LLDPE hari ke 20	,220	6	,200(*)	,874	6	,243
	OPP/CPPmet hari ke 20	,185	6	,200(*)	,965	6	,860
	PET/PE/Al/LLDPE hari ke 20	,271	6	,192	,801	6	,060
	PET/LLDPE hari ke 25	,201	6	,200(*)	,953	6	,767
	OPP/CPPmet hari ke 25	,218	6	,200(*)	,933	6	,605
	PET/PE/Al/LLDPE hari ke 25	,259	6	,200(*)	,854	6	,171
	PET/LLDPE hari ke 30	,160	6	,200(*)	,969	6	,888
	OPP/CPPmet hari ke 30	,230	6	,200(*)	,892	6	,331
	PET/PE/Al/LLDPE hari ke 30	,233	6	,200(*)	,958	6	,808

* This is a lower bound of the true significance.
a Lilliefors Significance Correction

– Kadar Air

Tests of Normality

		Kolmogorov-Smirnov(a)			Shapiro-Wilk		
	sampel	Statistic	df	Sig.	Statistic	df	Sig.
kdrair	PET/LLDPE hari ke 1	,203	6	,200(*)	,880	6	,270
	OPP/CPPmet hari ke 1	,161	6	,200(*)	,980	6	,952
	PET/PE/Al/LLDPE hari ke 1	,168	6	,200(*)	,952	6	,755
	PET/LLDPE hari ke 5	,193	6	,200(*)	,957	6	,794
	OPP/CPPmet hari ke 5	,256	6	,200(*)	,901	6	,378
	PET/PE/Al/LLDPE hari ke 5	,196	6	,200(*)	,908	6	,422
	PET/LLDPE hari ke 10	,188	6	,200(*)	,975	6	,925
	OPP/CPPmet hari ke 10	,204	6	,200(*)	,961	6	,825
	PET/PE/Al/LLDPE hari ke 10	,215	6	,200(*)	,875	6	,248
	PET/LLDPE hari ke 15	,254	6	,200(*)	,900	6	,372
	OPP/CPPmet hari ke 15	,285	6	,140	,831	6	,110
	PET/PE/Al/LLDPE hari ke 15	,232	6	,200(*)	,940	6	,658
	PET/LLDPE hari ke 20	,227	6	,200(*)	,836	6	,121
	OPP/CPPmet hari ke 20	,265	6	,200(*)	,854	6	,168
	PET/PE/Al/LLDPE hari ke 20	,167	6	,200(*)	,957	6	,800
	PET/LLDPE hari ke 25	,215	6	,200(*)	,875	6	,248
	OPP/CPPmet hari ke 25	,266	6	,200(*)	,909	6	,431
	PET/PE/Al/LLDPE hari ke 25	,285	6	,138	,801	6	,059
	PET/LLDPE hari ke 30	,232	6	,200(*)	,942	6	,677
	OPP/CPPmet hari ke 30	,297	6	,106	,847	6	,149
	PET/PE/Al/LLDPE hari ke 30	,215	6	,200(*)	,894	6	,342

* This is a lower bound of the true significance.
a Lilliefors Significance Correction

– Bilangan TBA

Tests of Normality

		Kolmogorov-Smirnov(a)			Shapiro-Wilk		
	sampel	Statistic	df	Sig.	Statistic	df	Sig.
tba	PET/LLDPE hari ke 1	,163	6	,200(*)	,970	6	,890
	OPP/CPPmet hari ke 1	,192	6	,200(*)	,964	6	,852
	PET/PE/Al/LLDPE hari ke 1	,251	6	,200(*)	,852	6	,162
	PET/LLDPE hari ke 5	,230	6	,200(*)	,836	6	,120
	OPP/CPPmet hari ke 5	,187	6	,200(*)	,966	6	,862
	PET/PE/Al/LLDPE hari ke 5	,206	6	,200(*)	,911	6	,444
	PET/LLDPE hari ke 10	,187	6	,200(*)	,921	6	,511
	OPP/CPPmet hari ke 10	,202	6	,200(*)	,921	6	,515
	PET/PE/Al/LLDPE hari ke 10	,269	6	,200(*)	,876	6	,250
	PET/LLDPE hari ke 15	,171	6	,200(*)	,922	6	,522
	OPP/CPPmet hari ke 15	,209	6	,200(*)	,904	6	,396
	PET/PE/Al/LLDPE hari ke 15	,279	6	,160	,846	6	,146
	PET/LLDPE hari ke 20	,272	6	,188	,882	6	,278
	OPP/CPPmet hari ke 20	,216	6	,200(*)	,949	6	,728
	PET/PE/Al/LLDPE hari ke 20	,212	6	,200(*)	,889	6	,312

PET/LLDPE hari ke 25	,182	6	,200(*)	,896	6	,349
OPP/CPPmet hari ke 25	,252	6	,200(*)	,878	6	,262
PET/PE/Al/LLDPE hari ke 25	,199	6	,200(*)	,956	6	,789
PET/LLDPE hari ke 30	,293	6	,118	,823	6	,094
OPP/CPPmet hari ke 30	,246	6	,200(*)	,935	6	,618
PET/PE/Al/LLDPE hari ke 30	,234	6	,200(*)	,870	6	,225

* This is a lower bound of the true significance.
a Lilliefors Significance Correction

c. Uji Fisik

– Kemampuan Pembasahan

Tests of Normality

		Kolmogorov-Smirnov(a)			Shapiro-Wilk		
	sampel	Statistic	df	Sig.	Statistic	df	Sig.
kbasah	PET/LLDPE hari ke 1	,167	10	,200(*)	,905	10	,247
	OPP/CPPmet hari ke 1	,168	10	,200(*)	,968	10	,875
	PET/PE/Al/LLDPE hari ke 1	,134	10	,200(*)	,941	10	,563
	PET/LLDPE hari ke 5	,135	10	,200(*)	,982	10	,977
	OPP/CPPmet hari ke 5	,249	10	,079	,859	10	,075
	PET/PE/Al/LLDPE hari ke 5	,231	10	,141	,847	10	,054
	PET/LLDPE hari ke 10	,208	10	,200(*)	,896	10	,200
	OPP/CPPmet hari ke 10	,193	10	,200(*)	,944	10	,598
	PET/PE/Al/LLDPE hari ke 10	,165	10	,200(*)	,939	10	,543
	PET/LLDPE hari ke 15	,132	10	,200(*)	,976	10	,942
	OPP/CPPmet hari ke 15	,154	10	,200(*)	,975	10	,934
	PET/PE/Al/LLDPE hari ke 15	,178	10	,200(*)	,927	10	,415
	PET/LLDPE hari ke 20	,217	10	,200(*)	,906	10	,258
	OPP/CPPmet hari ke 20	,226	10	,160	,853	10	,064
	PET/PE/Al/LLDPE hari ke 20	,151	10	,200(*)	,946	10	,617
	PET/LLDPE hari ke 25	,177	10	,200(*)	,947	10	,631
	OPP/CPPmet hari ke 25	,228	10	,148	,855	10	,067
	PET/PE/Al/LLDPE hari ke 25	,166	10	,200(*)	,895	10	,193
	PET/LLDPE hari ke 30	,195	10	,200(*)	,933	10	,474
	OPP/CPPmet hari ke 30	,205	10	,200(*)	,940	10	,558
	PET/PE/Al/LLDPE hari ke 30	,116	10	,200(*)	,960	10	,784

* This is a lower bound of the true significance.
a Lilliefors Significance Correction

– *Bulk Density*

Tests of Normality

		Kolmogorov-Smirnov(a)			Shapiro-Wilk		
	sampel	Statistic	df	Sig.	Statistic	df	Sig.
bulkdens	PET/LLDPE hari ke 1	,191	10	,200(*)	,938	10	,533
	OPP/CPPmet hari ke 1	,137	10	,200(*)	,972	10	,910
	PET/PE/Al/LLDPE hari ke 1	,223	10	,175	,889	10	,166
	PET/LLDPE hari ke 5	,130	10	,200(*)	,963	10	,820
	OPP/CPPmet hari ke 5	,142	10	,200(*)	,953	10	,702

PET/PE/Al/LLDPE hari ke 5	,191	10	,200(*)	,968	10	,874
PET/LLDPE hari ke 10	,215	10	,200(*)	,898	10	,210
OPP/CPPmet hari ke 10	,180	10	,200(*)	,927	10	,421
PET/PE/Al/LLDPE hari ke 10	,247	10	,086	,918	10	,338
PET/LLDPE hari ke 15	,174	10	,200(*)	,950	10	,674
OPP/CPPmet hari ke 15	,236	10	,120	,915	10	,315
PET/PE/Al/LLDPE hari ke 15	,116	10	,200(*)	,971	10	,901
PET/LLDPE hari ke 20	,150	10	,200(*)	,954	10	,718
OPP/CPPmet hari ke 20	,161	10	,200(*)	,932	10	,469
PET/PE/Al/LLDPE hari ke 20	,204	10	,200(*)	,859	10	,074
PET/LLDPE hari ke 25	,206	10	,200(*)	,910	10	,279
OPP/CPPmet hari ke 25	,176	10	,200(*)	,928	10	,427
PET/PE/Al/LLDPE hari ke 25	,212	10	,200(*)	,915	10	,318
PET/LLDPE hari ke 30	,207	10	,200(*)	,913	10	,304
OPP/CPPmet hari ke 30	,190	10	,200(*)	,914	10	,307
PET/PE/Al/LLDPE hari ke 30	,220	10	,185	,848	10	,055

* This is a lower bound of the true significance.

a Lilliefors Significance Correction

Lampiran 2. Hasil Analisa Deskriptif

a. Uji Mikrobiologi

Descriptives

mikro

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
PET/LLDPE hari ke 1	2	3,58500	,124451	,088000	2,46685	4,70315	3,497	3,673
OPP/CPPmet hari ke 1	2	3,54100	,050912	,036000	3,08358	3,99842	3,505	3,577
PET/PE/Al/LLDPE hari ke 1	2	3,48950	,051619	,036500	3,02572	3,95328	3,453	3,526
PET/LLDPE hari ke 5	2	3,86850	,091217	,064500	3,04895	4,68805	3,804	3,933
OPP/CPPmet hari ke 5	2	3,71950	,051619	,036500	3,25572	4,18328	3,683	3,756
PET/PE/Al/LLDPE hari ke 5	2	3,60900	,124451	,088000	2,49085	4,72715	3,521	3,697
PET/LLDPE hari ke 10	2	4,02600	,043841	,031000	3,63211	4,41989	3,995	4,057
OPP/CPPmet hari ke 10	2	3,90250	,009192	,006500	3,81991	3,98509	3,896	3,909
PET/PE/Al/LLDPE hari ke 10	2	3,82450	,115258	,081500	2,78894	4,86006	3,743	3,906
PET/LLDPE hari ke 15	2	4,13600	,158392	,112000	2,71291	5,55909	4,024	4,248
OPP/CPPmet hari ke 15	2	4,02450	,136472	,096500	2,79835	5,25065	3,928	4,121
PET/PE/Al/LLDPE hari ke 15	2	3,96200	,066468	,047000	3,36481	4,55919	3,915	4,009
PET/LLDPE hari ke 20	2	4,19150	,101116	,071500	3,28301	5,09999	4,120	4,263
OPP/CPPmet hari ke 20	2	4,07700	,166877	,118000	2,57767	5,57633	3,959	4,195
PET/PE/Al/LLDPE hari ke 20	2	4,03700	,043841	,031000	3,64311	4,43089	4,006	4,068
PET/LLDPE hari ke 25	2	4,43550	,027577	,019500	4,18773	4,68327	4,416	4,455
OPP/CPPmet hari ke 25	2	4,16450	,095459	,067500	3,30683	5,02217	4,097	4,232
PET/PE/Al/LLDPE hari ke 25	2	4,10800	,033941	,024000	3,80305	4,41295	4,084	4,132
PET/LLDPE hari ke 30	2	4,87950	,061518	,043500	4,32678	5,43222	4,836	4,923

OPP/CPPmet hari ke 30	2	4,21250	,094045	,066500	3,36754	5,05746	4,146	4,279
PET/PE/Al/LLDPE hari ke 30	2	4,15200	,041012	,029000	3,78352	4,52048	4,123	4,181
Total	42	3,99740	,324291	,050039	3,89635	4,09846	3,453	4,923

b. Uji Kimia

– Aw

Descriptives

aw

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
PET/LLDPE hari ke 1	6	,39400	,011713	,004782	,38171	,40629	,376	,410
OPP/CPPmet hari ke 1	6	,40550	,002345	,000957	,40304	,40796	,402	,408
PET/PE/Al/LLDPE hari ke 1	6	,39933	,014166	,005783	,38447	,41420	,386	,421
PET/LLDPE hari ke 5	6	,42600	,003033	,001238	,42282	,42918	,422	,431
OPP/CPPmet hari ke 5	6	,40600	,023808	,009719	,38102	,43098	,378	,436
PET/PE/Al/LLDPE hari ke 5	6	,40200	,019339	,007895	,38170	,42230	,380	,430
PET/LLDPE hari ke 10	6	,46600	,016745	,006836	,44843	,48357	,442	,490
OPP/CPPmet hari ke 10	6	,42000	,002191	,000894	,41770	,42230	,417	,423
PET/PE/Al/LLDPE hari ke 10	6	,40400	,019100	,007797	,38396	,42404	,379	,422
PET/LLDPE hari ke 15	6	,51200	,003688	,001506	,50813	,51587	,507	,517
OPP/CPPmet hari ke 15	6	,43300	,009818	,004008	,42270	,44330	,425	,450
PET/PE/Al/LLDPE hari ke 15	6	,40800	,004243	,001732	,40355	,41245	,404	,415
PET/LLDPE hari ke 20	6	,55300	,006870	,002805	,54579	,56021	,546	,562
OPP/CPPmet hari ke 20	6	,45100	,012474	,005092	,43791	,46409	,432	,467
PET/PE/Al/LLDPE hari ke 20	6	,41500	,022909	,009352	,39096	,43904	,392	,440
PET/LLDPE hari ke 25	6	,57800	,005899	,002408	,57181	,58419	,571	,588
OPP/CPPmet hari ke 25	6	,46467	,026174	,010685	,43720	,49213	,422	,495

PET/PE/Al/LLDPE hari ke 25	6	,42400	,007127	,002910	,41652	,43148	,416	,432
PET/LLDPE hari ke 30	6	,59600	,020179	,008238	,57482	,61718	,567	,621
OPP/CPPmet hari ke 30	6	,48200	,007668	,003130	,47395	,49005	,474	,496
PET/PE/Al/LLDPE hari ke 30	6	,43000	,017844	,007285	,41127	,44873	,408	,458
Total	126	,45093	,060846	,005421	,44020	,46166	,376	,621

– Kadar Air

Descriptives

kdrair

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
PET/LLDPE hari ke 1	6	2,41667	,369685	,150923	2,02871	2,80463	2,000	2,850
OPP/CPPmet hari ke 1	6	2,85833	,567817	,231811	2,26245	3,45422	2,050	3,650
PET/PE/Al/LLDPE hari ke 1	6	2,65000	,308221	,125831	2,32654	2,97346	2,300	3,100
PET/LLDPE hari ke 5	6	4,19167	,124164	,050690	4,06136	4,32197	4,000	4,350
OPP/CPPmet hari ke 5	6	4,20833	,405483	,165538	3,78280	4,63386	3,500	4,650
PET/PE/Al/LLDPE hari ke 5	6	3,71667	,450185	,183787	3,24423	4,18911	3,100	4,200
PET/LLDPE hari ke 10	6	5,13333	,616982	,251882	4,48585	5,78082	4,250	6,100
OPP/CPPmet hari ke 10	6	4,91300	,304869	,124462	4,59306	5,23294	4,550	5,382
PET/PE/Al/LLDPE hari ke 10	6	4,40000	,176068	,071880	4,21523	4,58477	4,100	4,550
PET/LLDPE hari ke 15	6	6,88333	,703325	,287131	6,14524	7,62143	6,050	7,750
OPP/CPPmet hari ke 15	6	6,21667	,338625	,138243	5,86130	6,57203	5,900	6,650
PET/PE/Al/LLDPE hari ke 15	6	5,62500	,282400	,115289	5,32864	5,92136	5,200	5,950
PET/LLDPE hari ke 20	6	7,41667	,386868	,157938	7,01067	7,82266	6,700	7,750
OPP/CPPmet hari ke 20	6	6,54167	,265361	,108333	6,26319	6,82015	6,300	6,900
PET/PE/Al/LLDPE hari ke 20	6	5,95000	,164317	,067082	5,77756	6,12244	5,750	6,200

PET/LLDPE hari ke 25	6	8,80000	,176068	,071880	8,61523	8,98477	8,650	9,100
OPP/CPPmet hari ke 25	6	7,40000	,596657	,243584	6,77385	8,02615	6,550	8,100
PET/PE/Al/LLDPE hari ke 25	6	6,59167	,453229	,185030	6,11603	7,06730	6,100	7,050
PET/LLDPE hari ke 30	6	9,42500	,150831	,061577	9,26671	9,58329	9,200	9,600
OPP/CPPmet hari ke 30	6	8,05833	,091742	,037454	7,96206	8,15461	7,900	8,150
PET/PE/Al/LLDPE hari ke 30	6	6,90000	,126491	,051640	6,76726	7,03274	6,750	7,050
Total	126	5,72840	1,975235	,175968	5,38013	6,07666	2,000	9,600

– Bilangan TBA

Descriptives

tba

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
PET/LLDPE hari ke 1	6	,14233	,031709	,012945	,10906	,17561	,103	,188
OPP/CPPmet hari ke 1	6	,13267	,027296	,011144	,10402	,16131	,095	,173
PET/PE/Al/LLDPE hari ke 1	6	,09200	,029536	,012058	,06100	,12300	,059	,125
PET/LLDPE hari ke 5	6	,22083	,091274	,037263	,12505	,31662	,135	,334
OPP/CPPmet hari ke 5	6	,19317	,095636	,039043	,09280	,29353	,039	,310
PET/PE/Al/LLDPE hari ke 5	6	,16317	,035301	,014412	,12612	,20021	,126	,225
PET/LLDPE hari ke 10	6	,28867	,033625	,013728	,25338	,32395	,245	,327
OPP/CPPmet hari ke 10	6	,22683	,036108	,014741	,18894	,26473	,176	,268
PET/PE/Al/LLDPE hari ke 10	6	,19267	,033486	,013672	,15752	,22781	,160	,243
PET/LLDPE hari ke 15	6	,32350	,049831	,020343	,27121	,37579	,248	,374
OPP/CPPmet hari ke 15	6	,24883	,074424	,030384	,17073	,32694	,173	,380
PET/PE/Al/LLDPE hari ke 15	6	,20850	,032715	,013356	,17417	,24283	,179	,269
PET/LLDPE hari ke 20	6	,38233	,098701	,040294	,27875	,48591	,268	,509
OPP/CPPmet hari ke 20	6	,28150	,057050	,023291	,22163	,34137	,190	,349

PET/PE/Al/LLDPE hari ke 20	6	,23250	,057702	,023557	,17195	,29305	,161	,298
PET/LLDPE hari ke 25	6	,43733	,074040	,030227	,35963	,51503	,360	,535
OPP/CPPmet hari ke 25	6	,32833	,087669	,035791	,23633	,42034	,212	,417
PET/PE/Al/LLDPE hari ke 25	6	,27533	,077879	,031794	,19360	,35706	,151	,365
PET/LLDPE hari ke 30	6	,61200	,121438	,049577	,48456	,73944	,392	,707
OPP/CPPmet hari ke 30	6	,49433	,107625	,043938	,38139	,60728	,334	,668
PET/PE/Al/LLDPE hari ke 30	6	,42667	,101024	,041243	,32065	,53268	,335	,610
Total	126	,28112	,142845	,012726	,25593	,30630	,039	,707

c. Uji Fisik

– Kemampuan Pembasahan

Descriptives

kbasah

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
PET/LLDPE hari ke 1	10	111,300	21,5959	6,8292	95,851	126,749	78,6	136,7
OPP/CPPmet hari ke 1	10	113,080	34,8932	11,0342	88,119	138,041	64,8	172,1
PET/PE/Al/LLDPE hari ke 1	10	100,550	20,6050	6,5159	85,810	115,290	68,8	127,9
PET/LLDPE hari ke 5	10	76,600	24,2350	7,6638	59,263	93,937	35,4	116,7
OPP/CPPmet hari ke 5	10	73,300	23,3892	7,3963	56,568	90,032	35,6	96,8
PET/PE/Al/LLDPE hari ke 5	10	64,000	20,8755	6,6014	49,067	78,933	43,7	107,7
PET/LLDPE hari ke 10	10	45,400	8,3925	2,6539	39,396	51,404	34,0	56,2
OPP/CPPmet hari ke 10	10	62,500	19,6789	6,2230	48,423	76,577	32,4	90,2
PET/PE/Al/LLDPE hari ke 10	10	61,200	13,6067	4,3028	51,466	70,934	36,8	78,7
PET/LLDPE hari ke 15	10	39,800	4,9824	1,5756	36,236	43,364	30,1	47,8
OPP/CPPmet hari ke 15	10	45,100	7,5722	2,3945	39,683	50,517	33,9	59,7

PET/PE/Al/LLDPE hari ke 15	10	50,500	14,8903	4,7087	39,848	61,152	33,0	80,4
PET/LLDPE hari ke 20	10	32,100	3,4881	1,1030	29,605	34,595	27,3	36,9
OPP/CPPmet hari ke 20	10	40,600	5,3026	1,6768	36,807	44,393	28,6	45,4
PET/PE/Al/LLDPE hari ke 20	10	47,590	7,0238	2,2211	42,565	52,615	35,2	56,8
PET/LLDPE hari ke 25	10	27,800	1,9602	,6199	26,398	29,202	25,1	31,1
OPP/CPPmet hari ke 25	10	36,400	4,9524	1,5661	32,857	39,943	29,4	48,1
PET/PE/Al/LLDPE hari ke 25	10	43,800	9,1082	2,8803	37,284	50,316	31,6	55,3
PET/LLDPE hari ke 30	10	25,300	7,2552	2,2943	20,110	30,490	12,0	35,0
OPP/CPPmet hari ke 30	10	34,300	7,2480	2,2920	29,115	39,485	21,2	49,3
PET/PE/Al/LLDPE hari ke 30	10	42,400	7,4956	2,3703	37,038	47,762	32,4	55,7
Total	210	55,887	29,3274	2,0238	51,897	59,876	12,0	172,1

– *Bulk Density*

Descriptives

bulkdens

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
PET/LLDPE hari ke 1	10	,74470	,026344	,008331	,72585	,76355	,700	,779
OPP/CPPmet hari ke 1	10	,74040	,018253	,005772	,72734	,75346	,711	,777
PET/PE/Al/LLDPE hari ke 1	10	,72290	,019410	,006138	,70901	,73679	,680	,749
PET/LLDPE hari ke 5	10	,77180	,036511	,011546	,74568	,79792	,722	,835
OPP/CPPmet hari ke 5	10	,75450	,023973	,007581	,73735	,77165	,722	,794
PET/PE/Al/LLDPE hari ke 5	10	,73630	,032472	,010269	,71307	,75953	,685	,794
PET/LLDPE hari ke 10	10	,78710	,031974	,010111	,76423	,80997	,733	,839
OPP/CPPmet hari ke 10	10	,75920	,021827	,006902	,74359	,77481	,731	,793
PET/PE/Al/LLDPE hari ke 10	10	,73650	,038425	,012151	,70901	,76399	,679	,797

PET/LLDPE hari ke 15	10	,81340	,018112	,005728	,80044	,82636	,789	,844
OPP/CPPmet hari ke 15	10	,78250	,022491	,007112	,76641	,79859	,740	,828
PET/PE/Al/LLDPE hari ke 15	10	,75290	,028777	,009100	,73231	,77349	,714	,807
PET/LLDPE hari ke 20	10	,84130	,037062	,011720	,81479	,86781	,772	,892
OPP/CPPmet hari ke 20	10	,80760	,031781	,010050	,78487	,83033	,771	,868
PET/PE/Al/LLDPE hari ke 20	10	,76830	,030096	,009517	,74677	,78983	,698	,800
PET/LLDPE hari ke 25	10	,84820	,022972	,007265	,83177	,86463	,822	,891
OPP/CPPmet hari ke 25	10	,81410	,013042	,004124	,80477	,82343	,794	,831
PET/PE/Al/LLDPE hari ke 25	10	,77430	,016573	,005241	,76244	,78616	,747	,794
PET/LLDPE hari ke 30	10	,85530	,031595	,009991	,83300	,87820	,808	,895
OPP/CPPmet hari ke 30	10	,82120	,021374	,006759	,80591	,83649	,794	,866
PET/PE/Al/LLDPE hari ke 30	10	,78080	,026144	,008267	,76210	,79950	,755	,843
Total	210	,78160	,046226	,003190	,77531	,78789	,679	,895

Lampiran 3. Hasil Analisa *Post Hoc*

a. Uji Mikrobiologi

mikro

Duncan

sampel	N	Subset for alpha = .05									
		1	2	3	4	5	6	7	8	9	10
PET/PE/Al/LLDPE hari ke 1	2	3,48950									
OPP/CPPmet hari ke 1	2	3,54100	3,54100								
PET/LLDPE hari ke 1	2	3,58500	3,58500								
PET/PE/Al/LLDPE hari ke 5	2	3,60900	3,60900								
OPP/CPPmet hari ke 5	2		3,71950	3,71950							
PET/PE/Al/LLDPE hari ke 10	2			3,82450	3,82450						
PET/LLDPE hari ke 5	2			3,86850	3,86850	3,86850					
OPP/CPPmet hari ke 10	2				3,90250	3,90250	3,90250				
PET/PE/Al/LLDPE hari ke 15	2				3,96200	3,96200	3,96200	3,96200			
OPP/CPPmet hari ke 15	2					4,02450	4,02450	4,02450	4,02450		
PET/LLDPE hari ke 10	2					4,02600	4,02600	4,02600	4,02600		
PET/PE/Al/LLDPE hari ke 20	2					4,03700	4,03700	4,03700	4,03700		
OPP/CPPmet hari ke 20	2						4,07700	4,07700	4,07700		
PET/PE/Al/LLDPE hari ke 25	2							4,10800	4,10800		
PET/LLDPE hari ke 15	2							4,13600	4,13600		
PET/PE/Al/LLDPE hari ke 30	2								4,15200		
OPP/CPPmet hari ke 25	2								4,16450		
PET/LLDPE hari ke 20	2								4,19150		
OPP/CPPmet hari ke 30	2								4,21250		
PET/LLDPE hari ke 25	2									4,43550	

PET/LLDPE hari ke 30	2											4,87
Sig.		,182	,050	,089	,126	,073	,063	,067	,053	1,000	1,000	

Means for groups in homogeneous subsets are displayed.
a Uses Harmonic Mean Sample Size = 2,000.

b. Uji Kimia

– Aw

aw

Duncan

sampel	N	Subset for alpha = .05											
		1	2	3	4	5	6	7	8	9	10	11	12
PET/LLDPE hari ke 1	6	,39400											
PET/PE/Al/LLDPE hari ke 1	6	,39933	,39933										
PET/PE/Al/LLDPE hari ke 5	6	,40200	,40200	,40200									
PET/PE/Al/LLDPE hari ke 10	6	,40400	,40400	,40400									
OPP/CPPmet hari ke 1	6	,40550	,40550	,40550	,40550								
OPP/CPPmet hari ke 5	6	,40600	,40600	,40600	,40600								
PET/PE/Al/LLDPE hari ke 15	6	,40800	,40800	,40800	,40800	,40800							
PET/PE/Al/LLDPE hari ke 20	6		,41500	,41500	,41500	,41500	,41500						
OPP/CPPmet hari ke 10	6			,42000	,42000	,42000	,42000						
PET/PE/Al/LLDPE hari ke 25	6				,42400	,42400	,42400						
PET/LLDPE hari ke 5	6					,42600	,42600						
PET/PE/Al/LLDPE hari ke 30	6						,43000						
OPP/CPPmet hari ke 15	6						,43300						
OPP/CPPmet hari ke 20	6							,45100					
OPP/CPPmet hari ke 25	6							,46467	,46467				
PET/LLDPE hari ke 10	6							,46600	,46600				
OPP/CPPmet hari ke 30	6								,48200				

PET/LLDPE hari ke 15	6									,51200			
PET/LLDPE hari ke 20	6										,55300		
PET/LLDPE hari ke 25	6											,57800	
PET/LLDPE hari ke 30	6												,59600
Sig.		,152	,108	,063	,052	,055	,059	,091	,050	1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.
a Uses Harmonic Mean Sample Size = 6,000.

– Kadar Air

kdrair

Duncan

sampel	N	Subset for alpha = .05											
		1	2	3	4	5	6	7	8	9	10	11	12
PET/LLDPE hari ke 1	6	2,41667											
PET/PE/Al/LLDPE hari ke 1	6	2,65000											
OPP/CPPmet hari ke 1	6	2,85833											
PET/PE/Al/LLDPE hari ke 5	6		3,71667										
PET/LLDPE hari ke 5	6			4,19167									
OPP/CPPmet hari ke 5	6			4,20833									
PET/PE/Al/LLDPE hari ke 10	6			4,40000									
OPP/CPPmet hari ke 10	6				4,91300								
PET/LLDPE hari ke 10	6				5,13333								
PET/PE/Al/LLDPE hari ke 15	6					5,62500							
PET/PE/Al/LLDPE hari ke 20	6					5,95000	5,95000						
OPP/CPPmet hari ke 15	6						6,21667	6,21667					
OPP/CPPmet hari ke 20	6							6,54167	6,54167				
PET/PE/Al/LLDPE hari ke 25	6							6,59167	6,59167				
PET/LLDPE hari ke 15	6								6,88333				

PET/PE/Al/LLDPE hari ke 30	6								6,90000				
OPP/CPPmet hari ke 25	6									7,40000			
PET/LLDPE hari ke 20	6									7,41667			
OPP/CPPmet hari ke 30	6										8,05833		
PET/LLDPE hari ke 25	6											8,80000	
PET/LLDPE hari ke 30	6												9,42500
Sig.		,071	1,000	,397	,339	,160	,248	,126	,159	,942	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.
a Uses Harmonic Mean Sample Size = 6,000.

– Bilangan TBA

tba

Duncan

sampel	N	Subset for alpha = .05										
		1	2	3	4	5	6	7	8	9	10	11
PET/PE/Al/LLDPE hari ke 1	6	,09200										
OPP/CPPmet hari ke 1	6	,13267	,13267									
PET/LLDPE hari ke 1	6	,14233	,14233	,14233								
PET/PE/Al/LLDPE hari ke 5	6	,16317	,16317	,16317	,16317							
PET/PE/Al/LLDPE hari ke 10	6		,19267	,19267	,19267	,19267						
OPP/CPPmet hari ke 5	6		,19317	,19317	,19317	,19317						
PET/PE/Al/LLDPE hari ke 15	6		,20850	,20850	,20850	,20850						
PET/LLDPE hari ke 5	6		,22083	,22083	,22083	,22083						
OPP/CPPmet hari ke 10	6		,22683	,22683	,22683	,22683						
PET/PE/Al/LLDPE hari ke 20	6			,23250	,23250	,23250	,23250					
OPP/CPPmet hari ke 15	6				,24883	,24883	,24883	,24883				
PET/PE/Al/LLDPE hari ke 25	6					,27533	,27533	,27533				
OPP/CPPmet hari ke 20	6					,28150	,28150	,28150				

PET/LLDPE hari ke 10	6					,28867	,28867	,28867				
PET/LLDPE hari ke 15	6						,32350	,32350	,32350			
OPP/CPPmet hari ke 25	6							,32833	,32833			
PET/LLDPE hari ke 20	6								,38233	,38233		
PET/PE/Al/LLDPE hari ke 30	6									,42667	,42667	
PET/LLDPE hari ke 25	6									,43733	,43733	
OPP/CPPmet hari ke 30	6										,49433	
PET/LLDPE hari ke 30	6											,61200
Sig.		,123	,055	,066	,082	,054	,057	,098	,187	,217	,128	1,000

Means for groups in homogeneous subsets are displayed.
a Uses Harmonic Mean Sample Size = 6,000.

c. Uji Fisik

– Kemampuan Pembasahan

kbasah

Duncan

sampel	N	Subset for alpha = .05								
		1	2	3	4	5	6	7	8	9
PET/LLDPE hari ke 30	10	25,300								
PET/LLDPE hari ke 25	10	27,800	27,800							
PET/LLDPE hari ke 20	10	32,100	32,100	32,100						
OPP/CPPmet hari ke 30	10	34,300	34,300	34,300						
OPP/CPPmet hari ke 25	10	36,400	36,400	36,400	36,400					
PET/LLDPE hari ke 15	10	39,800	39,800	39,800	39,800					
OPP/CPPmet hari ke 20	10	40,600	40,600	40,600	40,600					
PET/PE/Al/LLDPE hari ke 30	10		42,400	42,400	42,400					
PET/PE/Al/LLDPE hari ke 25	10			43,800	43,800					
OPP/CPPmet hari ke 15	10			45,100	45,100					

PET/LLDPE hari ke 10	10			45,400	45,400						
PET/PE/Al/LLDPE hari ke 20	10			47,590	47,590	47,590					
PET/PE/Al/LLDPE hari ke 15	10				50,500	50,500	50,500				
PET/PE/Al/LLDPE hari ke 10	10					61,200	61,200	61,200			
OPP/CPPmet hari ke 10	10						62,500	62,500	62,500		
PET/PE/Al/LLDPE hari ke 5	10						64,000	64,000	64,000		
OPP/CPPmet hari ke 5	10							73,300	73,300		
PET/LLDPE hari ke 5	10								76,600		
PET/PE/Al/LLDPE hari ke 1	10										100,550
PET/LLDPE hari ke 1	10										111,300
OPP/CPPmet hari ke 1	10										113,080
Sig.		,055	,068	,060	,086	,063	,075	,111	,062	,087	

Means for groups in homogeneous subsets are displayed.
a Uses Harmonic Mean Sample Size = 10,000.

– *Bulk Density*

bulkdens

Duncan

sampel	N	Subset for alpha = .05										
		1	2	3	4	5	6	7	8	9	10	11
PET/PE/Al/LLDPE hari ke 1	10	,72290										
PET/PE/Al/LLDPE hari ke 5	10	,73630	,73630									
PET/PE/Al/LLDPE hari ke 10	10	,73650	,73650									
OPP/CPPmet hari ke 1	10	,74040	,74040									
PET/LLDPE hari ke 1	10	,74470	,74470	,74470								
PET/PE/Al/LLDPE hari ke 15	10		,75290	,75290	,75290							
OPP/CPPmet hari ke 5	10		,75450	,75450	,75450	,75450						
OPP/CPPmet hari ke 10	10		,75920	,75920	,75920	,75920	,75920					

PET/PE/Al/LLDPE hari ke 20	10			,76830	,76830	,76830	,76830	,76830				
PET/LLDPE hari ke 5	10				,77180	,77180	,77180	,77180				
PET/PE/Al/LLDPE hari ke 25	10				,77430	,77430	,77430	,77430				
PET/PE/Al/LLDPE hari ke 30	10					,78080	,78080	,78080				
OPP/CPPmet hari ke 15	10						,78250	,78250				
PET/LLDPE hari ke 10	10							,78710	,78710			
OPP/CPPmet hari ke 20	10								,80760	,80760		
PET/LLDPE hari ke 15	10									,81340		
OPP/CPPmet hari ke 25	10									,81410		
OPP/CPPmet hari ke 30	10									,82120	,82120	
PET/LLDPE hari ke 20	10										,84130	,84130
PET/LLDPE hari ke 25	10											,84820
PET/LLDPE hari ke 30	10											,85560
Sig.		,102	,097	,076	,116	,051	,086	,169	,084	,301	,090	,257

Means for groups in homogeneous subsets are displayed.
a Uses Harmonic Mean Sample Size = 10,000.

Lampiran 4. Standar Nasional Indonesia Sup Krim Instan (SNI 01-4967-1999)

No	Jenis Uji	Satuan	Persyaratan
1.	Keadaan		
1.1.	Bau	-	Normal
1.2.	Rasa	-	Normal
1.3.	Tekstur	-	Berbentuk larutan kental setelah diseduh / dimasak dengan air mendidih
2.	Protein	%	Min 10
3.	Lemak	%	Min 5
4.	Air	%	Maks 8
5.	Bahan Tambahan Makanan		
5.1.	Pengawet	-	Sesuai SNI 01-0222-1995
5.2.	Penyedap rasa	-	Sesuai SNI 01-0222-1995
6.	Cemaran Logam		
6.1.	Timbal (Pb)	mg / kg	Maks 1,0
6.2.	Tembaga (Cu)	mg / kg	Maks 10,0
6.3.	Seng (Zn)	mg / kg	Maks 40,0
6.4.	Raksa (Hg)	mg / kg	Maks 0,05
7.	Arsen (As)	mg / kg	Maks 0,5
8.	Cemaran Mikroba		
8.1.	Angka lempeng total	koloni / g	Maks 1×10^5
8.2.	Coliform	APM / g	Maks 10
8.3.	*E. coli*	koloni / g	Negatip
8.4.	*Salmonella*	koloni / 25 g	Negatip
8.5.	Kapang / khamir	koloni / g	Maks 1×10^3

Lampiran 5. Perhitungan Pendugaan Umur Simpan

Umur simpan suatu bahan pangan pada kondisi normal (suhu kamar) dapat diketahui dengan menggunakan persamaan Arhennius seperti di bawah ini :

$$Q^{\delta T/10} = \frac{ts\,(T1)}{ts\,(T2)}$$

Keterangan : $Q^{\delta T/10}$ = faktor percepatan

ts (T1) = masa kadaluarsa bila disimpan pada suhu T

ts (T2) = masa kadaluarsa bila disimpan pada suhu (T + 10)

(Syarief dan Halid, 1993; Labuza, 1979).

Contoh perhitungan :

Dalam penelitian ini sampel disimpan selama 30 hari pada suhu 40°C dan bila dikonversikan pada suhu kamar (diasumsikan 25°C) menjadi :

Q = 2

ts (T2) = 30 hari

suhu kamar (T1) = 25°C

suhu penelitian (T2) = 40°C

δT = T2 – T1 = 40°C - 25°C = 15°C

Asumsi : 1 minggu = 7 hari

1 bulan = 30 hari

$ts\,(T1) = ts\,(T2) \times Q^{\delta T/10}$

$= 30 \text{ hari} \times 2^{15/10}$

$= 30 \text{ hari} \times 2{,}8284$

$= 84{,}8528 \text{ hari}$

$\approx 2{,}83 \text{ bulan}$

Konversi waktu penyimpanan antara suhu penelitian dan suhu kamar dapat dilihat pada tabel di bawah ini.

$Q_{10} = 2$	
Suhu penelitian (40°C)	Suhu kamar (25°C)
0 hari	0 bulan
1 hari	0,09 bulan
5 hari	0,47 bulan
10 hari	0,94 bulan
15 hari	1,41 bulan
20 hari	1,88 bulan
25 hari	2,36 bulan
30 hari	2,83 bulan