



**TEST LOCATION**

**TÜV SÜD China**

TÜV SÜD Products Testing (Shanghai) Co., Ltd.  
B-3/4, No.1999 Du Hui Road, Minhang District  
Shanghai 201108, P.R. China

**CLIENT NAME**

**GUANGDONG KINGFA SCI.&TECH. CO., LTD.**

**CLIENT ADDRESS**

NO. 28 Delong Avenue, Shijiao Town, Qingcheng District, Qingyuan City,  
Guangdong Province, China

**TEST PERIOD**

10-Jan-2022~25-Jul-2022

**RESULT SUMMARY**

As per client's request, with reference to #ISO 14855-1:2005 Determination of the ultimate aerobic biodegradability of plastic materials under controlled composting conditions — Method by analysis of evolved carbon dioxide —Part 1: General method

- **The percentage of biodegradation**

**See details enclosed**

**Prepared By**

*Shao Xiaomin*

(Shao Xiaomin)  
Report Drafter

**Authorized By**

*Leo Liu*

(Leo Liu)  
Authorized Signatory

**Note:** (1) General Terms & Conditions as mentioned overleaf. (2) The results relate only to the items tested. (3) The test report shall not be reproduced except in full without the written approval of the laboratory. (4) Without the agreement of the laboratory, the client is not authorized to use the test results for unapproved propaganda.

## RECEIPT DATE / TEST DATE

10-Jan-2022/ 10-Jan-2022

## THE FOLLOWING SAMPLE(S) WAS/WERE SUBMITTED

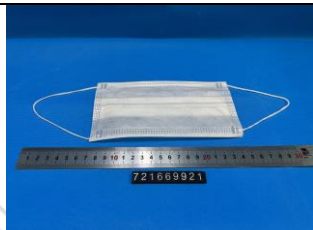
### BY/ ON BEHALF OF THE CLIENTS AS

Sample Name: Biodegradable Mask

Sample Specification: SPROUT P11E

Batch No./Date: /

Manufacturer: /

SAMPLE NO.	DESCRIPTION	PHOTOGRAPH
721669921	Mask	

## Summary

### Test result

-According to #ISO 14855-1:2005 Determination of the ultimate aerobic biodegradability of plastic materials under controlled composting conditions — Method by analysis of evolved carbon dioxide —Part 1: General method

Material name/ Number	Test Period (days)	Percentage biodegradation (%)	Relative percentage biodegradation (%)
Reference material (TLC grade cellulose)	180	95.2	/
Biodegradable Mask /721669921		97.5	102.5
Validity of results	<p>(1) The degree of biodegradation of the reference material is more than 70 % after 45 days: <input checked="" type="checkbox"/> yes / <input type="checkbox"/> no</p> <p>(2) The difference between the percentage biodegradation of the reference material in the different vessels is less than 20 % at the end of the test: <input checked="" type="checkbox"/> yes / <input type="checkbox"/> no</p> <p>(3) The inoculum in the blank has produced more than 50 mg but less than 150 mg of carbon dioxide per gram of volatile solids (mean values) after 10 days of incubation.: <input checked="" type="checkbox"/> yes / <input type="checkbox"/> no</p>		

#### Note:

- The relative percentage biodegradation is the rate of percentage biodegradation of test material to reference material.
- The following attached page of test report listed more detailed information .

## 1. Information of inoculum, test material and reference material

Table 1. Basic information sheet

Item	Inoculum	Reference material/ TLC (thin-layer chromatography) grade cellulose	Test material/ 721669921
pH	8.80	/	/
Moisture content (%)	49.5	4.2	0.5
Total dry solid content (%)	50.5	95.8	99.5
Volatile solids content (%)	26.4	100.0	100.0
Total organic carbon content (%)	23.24	44.40	50.87

## 2. Test system information

(1) The experiment was carried out at a constant temperature of  $58^{\circ}\text{C} \pm 2^{\circ}\text{C}$ , and free from vapours inhibitory to microorganisms. The volume of the reaction container is 2 liters.

(2) Source of inoculum: Lab self-made aerobic compost, the age of the compost: 4 months. Sieve the compost on a screen of 0.5 cm before used.

(3) Reference material/ TLC (thin-layer chromatography) grade cellulose: The molecular formula is  $(\text{C}_6\text{H}_{10}\text{O}_5)_n$ , the molecular weight is  $(162.14)_n$ , white crystalline powder.

(4) The test method determines the ultimate biodegradability and degree of disintegration of test material under conditions simulating an intensive aerobic composting process. Determine Carbon dioxide by 0.5mol/L sodium hydroxide absorption and 0.5mol/L hydrochloric acid volumetric solutions. The percentage biodegradation is given by the ratio of the carbon dioxide produced from the test material to the maximum theoretical amount of carbon dioxide that can be produced from the test material. The maximum theoretical amount of carbon dioxide produced is calculated from the measured total organic carbon (TOC) content which is determined by element analyzer. The percentage biodegradation does not include that amount of carbon converted to new cell biomass which is not metabolized in turn to carbon dioxide during the course of the test.

Table 2. Test system information sheet

Item	Inoculum			Reference materials/ TLC grade cellulose			Test item/ 721669921		
	1	2	3	1	2	3	1	2	3
Wet solids of inoculum, g	712.45	712.43	712.40	712.42	712.42	712.41	712.42	712.42	712.40
Total dry solids of inoculum, g	360.0	360.0	360.0	360.0	360.0	360.0	360.0	360.0	360.0
Volatile solids of inoculum, g	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1
Wet solids of test material, g	/	/	/	62.65	62.67	62.69	60.36	60.40	60.39
Total dry solids of test material, g	/	/	/	60.0	60.0	60.0	60.0	60.1	60.1
The theoretical amount of carbon dioxide ( $\text{ThCO}_2$ ), g/vessel	/	/	/	97.7	97.7	97.7	112.0	112.0	112.0
The ratio of total dry solids to wet solids, %	50.5	50.5	50.5	50.9	50.9	50.9	51.1	51.1	51.1
The ratio of volatile solids to total dry solids, %	26.4	26.4	26.4	/	/	/	/	/	/
C/N	19.7	19.7	19.7	25.9	25.9	25.9	26.9	26.9	26.9

Note: Pictures of test item before test, and after 180 days of testing were shown in Figure 2-5, respectively



### 3. Results

Table 3. Cumulative CO<sub>2</sub> production

Days	Cumulative CO <sub>2</sub> production (g)											
	Blank				Reference material				721669921			
	1	2	3	average	1	2	3	average	1	2	3	average
1	1.08	1.26	1.17	1.17	2.27	3.04	2.38	2.56	1.26	1.26	1.37	1.30
2	2.23	2.31	2.42	2.32	6.23	6.74	6.58	6.52	3.00	2.89	2.88	2.92
3	3.66	3.76	3.90	3.77	10.48	11.52	10.92	10.97	5.07	5.02	5.04	5.04
4	5.11	5.17	5.33	5.20	18.17	21.12	19.20	19.50	7.55	7.14	7.13	7.27
5	6.58	6.69	6.74	6.67	26.95	29.40	26.85	27.73	10.22	9.43	9.62	9.76
6	7.82	8.04	8.04	7.97	35.24	39.29	35.19	36.58	12.68	11.63	12.07	12.13
7	9.47	9.60	9.65	9.57	41.01	44.88	40.06	41.99	15.13	13.83	14.53	14.50
8	10.90	10.90	10.83	10.87	45.37	48.84	43.69	45.97	17.09	15.85	16.52	16.49
9	12.18	12.07	11.87	12.04	48.74	52.17	46.60	49.17	19.01	17.86	18.30	18.39
10	13.46	13.30	13.04	13.27	50.69	54.24	48.38	51.10	20.75	19.53	19.80	20.03
11	15.06	15.13	14.80	15.00	53.78	57.17	51.69	54.22	22.75	21.71	21.74	22.07
12	16.63	16.67	16.36	16.55	56.47	60.16	54.88	57.17	24.64	23.83	23.54	24.00
13	18.02	18.17	17.81	18.00	58.87	63.14	57.83	59.95	26.54	25.74	25.26	25.85
14	19.47	19.88	19.38	19.58	61.44	66.05	60.50	62.67	28.26	27.70	27.15	27.70
15	20.77	21.07	20.63	20.82	63.89	68.33	63.36	65.19	29.79	29.44	28.78	29.33
16	22.07	22.24	21.87	22.06	66.27	70.80	66.16	67.75	31.36	30.94	30.32	30.87
17	23.19	23.61	23.12	23.31	68.88	73.44	68.64	70.32	32.77	32.48	31.80	32.35
18	24.14	24.75	24.07	24.32	71.06	75.67	70.78	72.50	33.94	33.76	32.99	33.56
19	25.21	25.90	25.17	25.43	72.87	77.78	72.67	74.44	35.15	34.95	34.18	34.76
20	26.08	26.84	26.07	26.33	74.66	79.67	74.39	76.24	36.20	36.10	35.28	35.86
21	27.22	27.99	27.22	27.48	76.92	82.34	76.83	78.69	37.46	37.39	36.47	37.11
22	28.34	29.13	28.36	28.61	79.81	85.38	79.21	81.47	38.60	38.76	37.66	38.34
23	29.51	30.28	29.51	29.77	82.38	88.16	81.81	84.12	39.81	40.06	38.91	39.59
24	30.61	31.38	30.63	30.87	84.89	90.75	84.26	86.63	40.90	41.29	40.01	40.73
25	31.51	32.33	31.56	31.80	87.27	93.50	86.81	89.19	41.86	42.28	41.00	41.71
26	32.48	33.27	32.51	32.75	89.25	95.68	88.51	91.14	42.86	43.41	41.95	42.74
27	33.65	34.36	33.78	33.93	91.46	98.29	91.10	93.62	44.20	44.79	43.29	44.09
28	34.84	35.52	34.95	35.10	94.48	100.73	93.88	96.37	45.67	46.27	44.57	45.50
29	35.90	36.34	36.12	36.12	96.98	103.15	96.54	98.89	47.02	47.70	45.94	46.89
30	36.82	37.11	37.20	37.05	99.14	105.16	98.83	101.04	48.32	48.87	47.17	48.12
31	37.85	37.85	38.30	38.00	101.15	107.18	100.99	103.11	49.61	50.34	48.45	49.46
32	38.63	38.69	39.18	38.83	103.04	108.85	102.65	104.85	50.72	52.37	49.55	50.88
33	39.51	39.44	40.10	39.68	105.05	110.49	104.08	106.54	52.04	53.49	50.65	52.06
34	40.41	40.17	41.03	40.54	106.54	111.96	105.82	108.11	53.42	54.92	51.79	53.37
35	41.42	40.89	41.86	41.39	108.09	113.43	107.45	109.66	54.62	56.20	52.96	54.59
36	42.15	41.60	42.55	42.10	109.58	114.74	108.83	111.05	56.27	58.03	54.42	56.24
37	42.68	42.22	43.12	42.68	110.81	115.61	110.64	112.35	57.17	59.11	55.49	57.26
38	43.45	42.70	43.82	43.32	112.29	116.94	111.80	113.68	58.56	60.61	56.91	58.70



Table 4. Cumulative CO<sub>2</sub> production (cont'd)

Days	Cumulative CO <sub>2</sub> production (g)											
	Blank				Reference material				721669921			
	1	2	3	average	1	2	3	average	1	2	3	average
39	44.26	43.41	44.59	44.09	113.61	118.22	113.11	114.98	59.88	62.06	57.85	59.93
40	45.01	44.05	45.30	44.79	115.00	119.54	114.45	116.33	61.26	63.55	59.30	61.37
41	45.70	44.79	46.16	45.55	116.34	120.83	115.83	117.66	62.57	65.05	60.98	62.87
42	46.25	45.28	46.73	46.09	117.47	121.96	117.00	118.81	63.80	66.29	62.34	64.14
43	46.93	45.98	47.50	46.80	118.68	123.23	118.41	120.11	65.10	67.76	63.84	65.57
44	47.52	46.69	48.27	47.49	119.71	124.31	119.69	121.24	66.38	69.28	65.25	66.97
45	48.27	47.50	49.11	48.29	120.97	125.59	121.19	122.58	67.89	70.87	66.93	68.56
48	49.72	49.00	50.91	49.87	123.26	128.04	123.98	125.09	70.95	74.28	70.38	71.87
51	51.18	50.72	52.83	51.58	125.75	130.70	127.00	127.82	75.51	78.97	74.98	76.48
55	53.05	52.65	54.97	53.56	128.61	133.52	130.24	130.79	80.00	83.75	80.18	81.31
58	54.46	53.93	56.49	54.96	130.88	135.61	132.81	133.10	84.04	87.43	83.35	84.94
62	56.04	55.43	58.03	56.50	133.21	137.79	135.24	135.41	91.21	95.20	92.08	92.83
65	57.21	56.49	59.00	57.57	134.97	139.36	136.80	137.04	101.02	104.58	102.38	102.66
69	58.82	57.72	60.27	58.94	137.11	141.07	138.92	139.03	113.98	116.91	114.54	115.14
72	60.10	58.69	61.42	60.07	138.94	142.50	140.57	140.67	123.85	127.05	123.39	124.76
75	61.18	59.79	62.50	61.16	140.66	143.82	142.15	142.21	132.86	136.82	131.71	133.80
79	63.11	61.48	64.06	62.88	142.97	146.32	144.38	144.56	142.29	147.97	142.28	144.18
83	64.42	62.85	65.40	64.22	145.23	148.49	146.91	146.87	150.52	156.86	151.29	152.89
86	65.41	63.84	66.46	65.24	146.86	150.04	148.78	148.56	155.08	162.28	158.16	158.51
90	66.44	64.90	67.64	66.33	148.94	151.67	150.44	150.35	161.87	168.17	165.34	165.13
93	67.39	65.82	68.72	67.31	150.15	152.77	151.75	151.55	164.38	170.84	168.31	167.85
96	68.28	66.63	69.69	68.20	151.26	153.93	153.04	152.75	166.97	173.56	170.81	170.45
100	68.85	67.22	70.30	68.79	152.22	154.98	154.09	153.76	168.15	174.80	172.11	171.69
102	69.36	67.78	70.86	69.33	153.08	155.74	154.95	154.59	169.21	176.15	173.30	172.89
105	70.12	68.60	71.69	70.14	154.18	156.78	155.91	155.62	170.95	177.99	174.89	174.61
107	70.69	69.27	72.28	70.75	155.15	157.79	156.92	156.62	172.19	179.26	176.34	175.93
110	71.38	70.01	72.98	71.46	156.18	158.71	157.96	157.62	173.58	180.80	177.83	177.40
112	71.88	70.56	73.60	72.01	157.01	159.45	158.76	158.41	174.40	181.49	178.45	178.11
114	72.30	71.02	74.08	72.47	157.79	160.28	159.52	159.20	175.05	182.11	179.05	178.74
117	72.89	71.69	74.70	73.09	158.64	161.15	160.29	160.03	175.94	182.85	179.91	179.57
120	73.61	72.33	75.57	73.84	159.59	162.18	161.39	161.05	177.37	183.89	181.22	180.83
122	73.98	72.66	75.99	74.21	160.19	162.85	161.92	161.65	178.16	184.30	181.74	181.40
125	74.64	73.37	76.73	74.92	161.17	163.91	163.04	162.70	178.96	184.90	182.57	182.14
128	75.33	74.04	77.48	75.62	161.94	164.72	164.04	163.57	179.74	185.68	183.20	182.87
132	76.27	74.93	78.42	76.54	163.08	165.73	165.05	164.62	180.73	186.49	184.07	183.76
135	76.97	75.60	79.21	77.26	163.91	166.63	166.01	165.52	181.45	187.52	184.88	184.62
139	77.82	76.54	80.22	78.19	164.95	167.91	167.19	166.68	182.39	188.35	185.98	185.57
142	78.62	77.30	81.00	78.97	166.31	169.00	168.29	167.87	183.35	189.17	186.62	186.38
146	79.66	78.36	82.02	80.02	167.67	170.28	169.62	169.19	184.76	190.14	187.96	187.62
150	80.44	78.96	82.71	80.70	168.45	171.38	170.62	170.15	185.72	190.86	188.76	188.45
153	81.34	79.83	83.54	81.57	169.71	172.68	171.99	171.46	186.88	191.96	189.89	189.58

Table 5. Cumulative CO<sub>2</sub> production (cont'd)

days	Cumulative CO <sub>2</sub> production (g)											
	Blank				Reference material				721669921			
	1	2	3	average	1	2	3	average	1	2	3	average
156	82.08	80.57	84.25	82.30	170.98	174.06	173.38	172.81	187.98	192.81	190.69	190.49
160	83.08	81.54	85.38	83.33	172.33	175.51	174.85	174.23	189.17	193.94	191.73	191.61
163	83.84	82.20	86.18	84.07	173.67	176.77	176.21	175.55	190.30	194.90	192.63	192.61
167	84.77	83.07	87.19	85.01	174.94	177.99	177.43	176.79	191.57	196.17	193.80	193.85
170	85.68	83.86	88.09	85.88	176.27	179.12	178.53	177.97	192.63	197.34	194.74	194.90
174	86.81	84.78	89.13	86.91	177.63	180.45	179.68	179.25	193.83	198.43	195.78	196.01
177	87.71	85.56	90.00	87.75	178.97	181.59	180.97	180.51	194.88	199.62	196.56	197.02
180	88.54	86.32	90.72	88.52	180.16	182.58	181.92	181.55	195.69	200.46	197.26	197.80

Table 6. Percentage biodegradation

Days	Percentage biodegradation (%)							
	Reference material				721669921			
	1	2	3	average	1	2	3	average
1	1.1	1.9	1.2	1.4	0.1	0.1	0.2	0.1
2	4.0	4.5	4.4	4.3	0.6	0.5	0.5	0.5
3	6.9	7.9	7.3	7.4	1.2	1.1	1.1	1.1
4	13.3	16.3	14.3	14.6	2.1	1.7	1.7	1.8
5	20.8	23.3	20.7	21.6	3.2	2.5	2.6	2.8
6	27.9	32.1	27.8	29.3	4.2	3.3	3.7	3.7
7	32.2	36.1	31.2	33.2	5.0	3.8	4.4	4.4
8	35.3	38.8	33.6	35.9	5.6	4.4	5.0	5.0
9	37.6	41.1	35.4	38.0	6.2	5.2	5.6	5.7
10	38.3	41.9	35.9	38.7	6.7	5.6	5.8	6.0
11	39.7	43.2	37.5	40.1	6.9	6.0	6.0	6.3
12	40.9	44.6	39.2	41.6	7.2	6.5	6.2	6.6
13	41.8	46.2	40.7	42.9	7.6	6.9	6.5	7.0
14	42.9	47.6	41.9	44.1	7.8	7.2	6.8	7.3
15	44.1	48.6	43.5	45.4	8.0	7.7	7.1	7.6
16	45.3	49.9	45.1	46.8	8.3	7.9	7.4	7.9
17	46.6	51.3	46.4	48.1	8.5	8.2	7.6	8.1
18	47.8	52.6	47.5	49.3	8.6	8.4	7.7	8.3
19	48.6	53.6	48.3	50.2	8.7	8.5	7.8	8.3
20	49.5	54.6	49.2	51.1	8.8	8.7	8.0	8.5
21	50.6	56.1	50.5	52.4	8.9	8.8	8.0	8.6
22	52.4	58.1	51.8	54.1	8.9	9.1	8.1	8.7
23	53.9	59.8	53.2	55.6	9.0	9.2	8.2	8.8
24	55.3	61.3	54.6	57.1	9.0	9.3	8.2	8.8
25	56.8	63.1	56.3	58.7	9.0	9.4	8.2	8.8
26	57.8	64.4	57.0	59.8	9.0	9.5	8.2	8.9
27	58.9	65.9	58.5	61.1	9.2	9.7	8.3	9.1

Table 7. Percentage biodegradation (cnot'd)

Days	Percentage biodegradation (%)							
	Reference material				721669921			
	1	2	3	average	1	2	3	average
28	60.8	67.2	60.1	62.7	9.4	10.0	8.4	9.3
29	62.3	68.6	61.8	64.2	9.7	10.3	8.8	9.6
30	63.6	69.7	63.2	65.5	10.1	10.6	9.0	9.9
31	64.7	70.8	64.4	66.6	10.4	11.0	9.3	10.2
32	65.7	71.6	65.3	67.6	10.6	12.1	9.6	10.8
33	66.9	72.5	65.9	68.4	11.0	12.3	9.8	11.0
34	67.6	73.1	66.8	69.1	11.5	12.8	10.0	11.5
35	68.3	73.7	67.6	69.9	11.8	13.2	10.3	11.8
36	69.1	74.3	68.3	70.6	12.7	14.2	11.0	12.6
37	69.7	74.6	69.5	71.3	12.9	14.7	11.4	13.0
38	70.6	75.3	70.1	72.0	13.6	15.4	12.1	13.7
39	71.2	75.9	70.6	72.6	14.1	16.0	12.3	14.1
40	71.9	76.5	71.3	73.2	14.7	16.7	12.9	14.8
41	72.5	77.0	71.9	73.8	15.2	17.4	13.8	15.5
42	73.1	77.6	72.5	74.4	15.8	18.0	14.5	16.1
43	73.6	78.2	73.3	75.0	16.3	18.7	15.2	16.7
44	73.9	78.6	73.9	75.5	16.9	19.4	15.8	17.4
45	74.4	79.1	74.6	76.0	17.5	20.2	16.6	18.1
48	75.1	80.0	75.8	77.0	18.8	21.8	18.3	19.6
51	75.9	81.0	77.2	78.0	21.4	24.4	20.9	22.2
55	76.8	81.8	78.5	79.0	23.6	26.9	23.8	24.8
58	77.7	82.5	79.6	80.0	26.0	29.0	25.3	26.8
62	78.5	83.2	80.6	80.8	31.0	34.5	31.8	32.4
65	79.2	83.7	81.1	81.3	38.8	42.0	40.0	40.3
69	80.0	84.1	81.8	82.0	49.1	51.7	49.6	50.2
72	80.7	84.4	82.4	82.5	57.0	59.8	56.5	57.7
75	81.4	84.6	82.9	82.9	64.0	67.5	63.0	64.8
79	82.0	85.4	83.4	83.6	70.9	75.9	70.9	72.6
83	82.9	86.2	84.6	84.6	77.1	82.7	77.7	79.1
86	83.6	86.8	85.5	85.3	80.2	86.6	82.9	83.3
90	84.6	87.3	86.1	86.0	85.3	90.9	88.4	88.2
93	84.8	87.5	86.4	86.2	86.7	92.4	90.1	89.7
96	85.0	87.7	86.8	86.5	88.2	94.0	91.6	91.3
100	85.4	88.2	87.3	87.0	88.7	94.6	92.2	91.9
102	85.7	88.4	87.6	87.2	89.2	95.3	92.8	92.4
105	86.0	88.7	87.7	87.5	90.0	96.2	93.5	93.3
107	86.4	89.1	88.2	87.9	90.6	96.8	94.2	93.9
110	86.7	89.3	88.5	88.2	91.2	97.6	94.9	94.6
112	87.0	89.5	88.7	88.4	91.4	97.7	95.0	94.7
114	87.3	89.9	89.1	88.8	91.6	97.8	95.1	94.9
117	87.6	90.1	89.2	89.0	91.8	97.9	95.3	95.0



Table 8. Percentage biodegradation (cnot'd)

Days	Percentage biodegradation (%)							
	Reference material				721669921			
	1	2	3	average	1	2	3	average
120	87.8	90.4	89.6	89.3	92.5	98.2	95.8	95.5
122	88.0	90.7	89.7	89.5	92.8	98.2	96.0	95.7
125	88.3	91.1	90.2	89.8	92.9	98.2	96.1	95.7
128	88.4	91.2	90.5	90.0	93.0	98.2	96.0	95.7
132	88.6	91.3	90.6	90.1	93.0	98.1	96.0	95.7
135	88.7	91.5	90.8	90.3	93.0	98.4	96.1	95.8
139	88.8	91.8	91.1	90.6	93.0	98.3	96.2	95.9
142	89.4	92.1	91.4	91.0	93.2	98.3	96.1	95.9
146	89.7	92.4	91.7	91.3	93.5	98.3	96.3	96.1
150	89.8	92.8	92.0	91.5	93.8	98.3	96.4	96.2
153	90.2	93.2	92.5	92.0	94.0	98.5	96.7	96.4
156	90.8	93.9	93.2	92.6	94.4	98.6	96.7	96.6
160	91.1	94.3	93.6	93.0	94.5	98.7	96.7	96.7
163	91.7	94.9	94.3	93.6	94.9	98.9	96.9	96.9
167	92.1	95.2	94.6	93.9	95.2	99.2	97.1	97.2
170	92.5	95.4	94.8	94.3	95.3	99.5	97.2	97.3
174	92.9	95.7	94.9	94.5	95.5	99.5	97.2	97.4
177	93.4	96.0	95.4	94.9	95.7	99.8	97.1	97.5
180	93.8	96.3	95.5	95.2	95.7	99.9	97.1	97.5

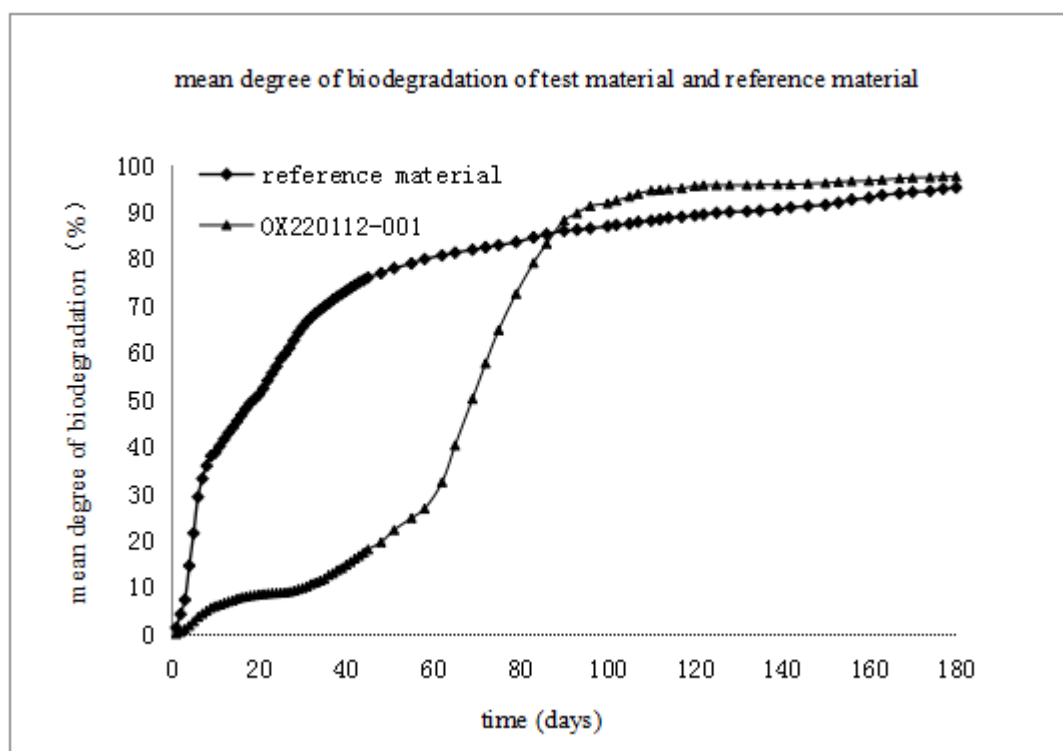


Fig 1. The mean percentage biodegradation curve



#### 4. Validity of results

- (1) Percentage biodegradation of three replicates of reference item was 74.4%、79.1% and 74.6% after 45 days of testing, respectively, and the mean value was 76.0%, greater than 70%.
- (2) The differences between the individual values of three replicates of reference item were 1.5%、1.1% and 0.4% after 180 days of testing. The differences between the individual values of three replicates of test item were 1.9%、2.4% and 0.5% after 180 days of testing. All were less than 20%.
- (3) During the first 10 days of testing, the compost inoculum produced 139.5 mg CO<sub>2</sub> per gram of volatile solids, within the range of 50 to 150 mg CO<sub>2</sub> per gram of volatile solids.
- The testing is therefore considered to be valid

#### 5. Appendices: Test pictures (Note: The color of the sample may deviate from their pictures due to lighting and the use of different monitors.)

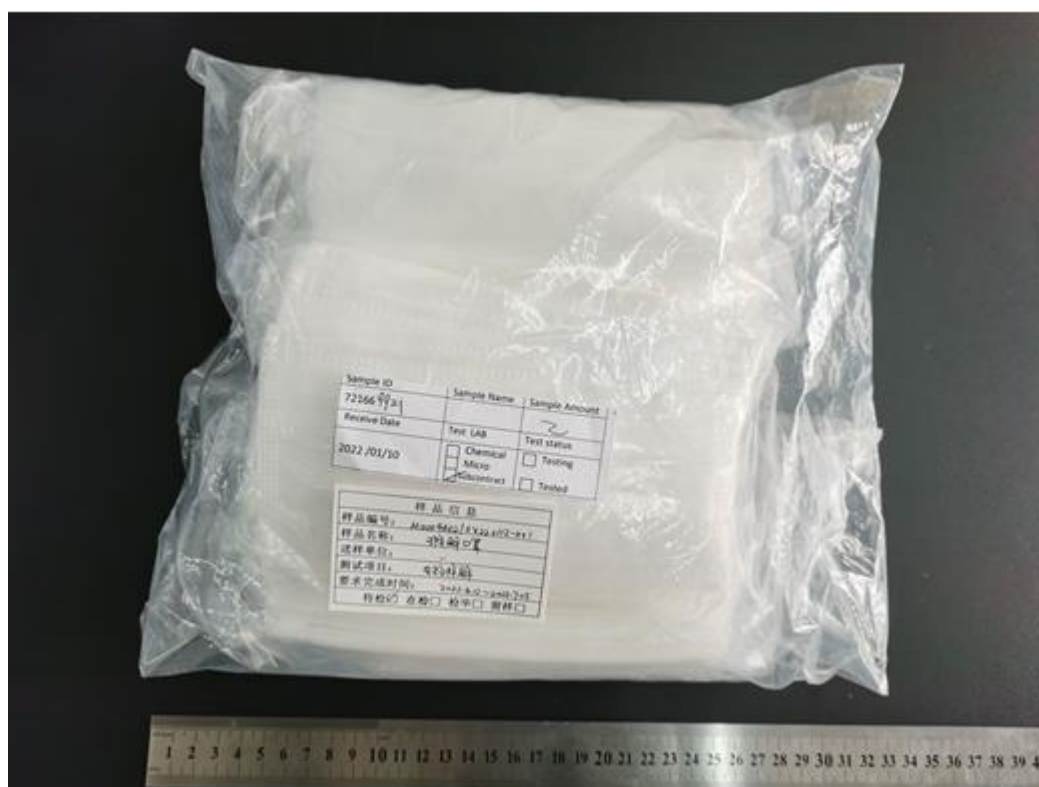


Fig 2. 721669921(OX220112-001)



Fig 3. The picture of 721669921(OX220112-001) before test



Fig 4. The mixture of 721669921(OX220112-001) and inoculum at the beginning of the test (Vessel 1)



Fig 5. The mixture of 721669921(OX22012-001) and inoculum at the end of the test (180 days, Vessel 1)

**Note:**

1. # Means the test standard is identical to GB/T 19277.1-2011 Determination of the ultimate aerobic biodegradability of plastic materials under controlled composting conditions — Method by analysis of evolved carbon dioxide — Part 1: General method
2. This test was carried out by external laboratory assessed as competent.
3. This report is for internal use only such as internal scientific research, education, quality control, product R&D.

-END OF THE TEST REPORT-