

सिपेट : केंद्रीय पेट्रोसायन अभियांत्रिकी
प्रौद्योगिकी संस्थान (आई पी टी)
(पूर्व में सेन्ट्रल इंस्टिट्यूट ऑफ प्लास्टिक्स इंजीनियरिंग एण्ड टेक्नोलॉजी)
रसायन एवं पेट्रो-रसायन विभाग
रसायन एवं उर्वरक मंत्रालय, भारत सरकार
प्लॉट नं. 630, फेज 4, जी.आई.डी.सी., वटवा, अहमदाबाद-382445.
दूरभाष : (079) 40103900-902, फैक्स : (079)-40083905
ईमेल : cipetahmd@gmail.com, ahmedabad@cipet.gov.in
वेबसाइट : www.cipet.gov.in
मुख्यालय : सिपेट, गिण्डी, चेन्नै - 600 032



CIPET : INSTITUTE OF PETROCHEMICALS
TECHNOLOGY (IPT)
(Formerly Central Institute of Plastics Engineering & Technology)
Department of Chemicals & Petrochemicals
Ministry of Chemicals & Fertilizers, Govt. of India
Plot No. 630, Phase-IV, G.I.D.C., Vatva, Ahmedabad-382 445.
Tele.: (079) 40103900-902, Fax : (079) 40083905
E-mail: cipetahmd@gmail.com, ahmedabad@cipet.gov.in
Web. : www.cipet.gov.in
Head Office : CIPET, Guindy, Chennai - 600 032

PLASTICS TESTING CENTRE

Series : **ANALYSIS REPORT**

परीक्षण रिपोर्ट / TEST REPORT

S.L. No.

10744

Issued to : M/s. NIKSHE MULTIPRODUCTS PVT LTD
Block No. 542,E, Panchratna Two Industrial
Park, Near Kamod Circle, Ahmedabad-Dholka
Highway, S.P. Ring Road, Ahmedabad-
382425,Gujarat. Mb.7405052002

Test Report No : 8493

Dated : 12.10.2022

Your Ref. No. : NIL

Dated : 02.03.2022

As per part C

Test Report as per Standard :

PART A

ULR No. TC816421000003931P

PARTICULARS OF SAMPLE SUBMITTED

- | | |
|---|-----------------------|
| a) Name of the sample(as stated by the party) | : Compostable Plastic |
| b) Grade/Variety/Type/Size/Class etc. | : --- |
| c) Code No. | : --- |
| d) Quantity (pcs/mtr/gm/nos) | : 1.5 kg. |
| e) Mode of packing
(Sealed carton/poly pouch/container or not) | : In Bag |
| f) Date of receipt of sample | : 02.03.2022 |
| g) Date of Performance of test | : 22.04.2022 |
| h) Any other information | : --- |

PART B

SUPPLEMENTARY INFORMATION

- | | |
|--|---------------------------------|
| a) Reference to sampling procedure | : Drawn & supplied by the party |
| b) Supporting documents for Measurements
Taken and results derived like graphs,
Tables, sketches and/or Photographs as
appropriate to test report if any (to be attached) | : As per Part C |
| c) Deviation from the test methods as
Prescribed in relevant ASTM/ISO/BIS/
Work instructions, if any | : Not Applicable |

AUTHORISED SIGNATORY

(Kiran D. Trivedi)
(Technical Officer)

AUTHORISED SIGNATORY
Page 1 of 10

**सिपेट : इंस्टिट्यूट ऑफ पेट्रोकेमिकल्स
टेक्नोलॉजी (आई पी टी)**

(पूर्व में सेन्ट्रल इंस्टिट्यूट ऑफ प्लास्टिक्स इंजीनियरिंग एण्ड टेक्नोलॉजी)
रसायन एवं पेट्रो-रसायन विभाग
रसायन एवं उर्वरक मंत्रालय, भारत सरकार
प्लॉट नं. 630, फेज 4, जी.आई.डी.सी., वटवा, अहमदाबाद-382445.
दूरभाष : (079) 40103900-902, फैक्स : (079)-40083905
ईमेल : cipetahmd@gmail.com, ahmedabad@cipet.gov.in
वेबसाइट : www.cipet.gov.in
मुख्यालय : सिपेट, गिण्डी, चेन्नै - 600 032



CIPET सि पे ट
probe • perform • practice • Plastics



**CIPET : INSTITUTE OF PETROCHEMICALS
TECHNOLOGY (IPT)**

(Formerly Central Institute of Plastics Engineering & Technology)
Department of Chemicals & Petrochemicals
Ministry of Chemicals & Fertilizers, Govt. of India
Plot No. 630, Phase-IV, G.I.D.C., Vatva, Ahmedabad-382 445.
Tele.: (079) 40103900-902, Fax : (079) 40083905
E-mail: cipetahmd@gmail.com, ahmedabad@cipet.gov.in
Web. : www.cipet.gov.in
Head Office : CIPET, Guindy, Chennai - 600 032

प्लास्टिक्स परीक्षण केन्द्र / PLASTICS TESTING CENTRE

ANALYSIS REPORT

**Report No.: 8493
Date : 12.10.2022**

**PART C
TEST RESULTS**

Sr. No.	Name of the Test	Test Method/Standard	Unit	Results obtained	Specified Requirements
Sample Details : : COMPOSTABLE PLASTIC (As stated by the party)					
1.	Material Identification	FTIR/DSC	--	Blends of PLA & PBAT	-----
2.	Disintegration(Dry mass passing through 2 mm sieve after 84 days)	IS 17088:2008	%	9.3	Not more than 10%
3.	Ultimate aerobic Biodegradation (with reference to 100% degradation of positive reference)	IS 17088:2008	%	90.58	>90 (At the end of the test period not more than 180 days)
4.	Plant growth study Monocotyledon(Rice) % Seed emergence	IS 17088:2008	%	95.0	>90
	Dicotyledon(tomato) % Seed emergence		%	92.5	>90

Note: The detailed observation on biodegradability test is enclosed as Annexure -I

AUTHORISED SIGNATORY

Kiran D. Tripathi
(Technical Officer)

AUTHORISED SIGNATORY
Page 2 of 10

Dr. Rajesh Panda
(Senior Technical Officer)

Head Office : CIPET, Guindy, Chennai - 600 032

सिपेट : इंस्टिट्यूट ऑफ पेट्रोकेमिकल्स
टेक्नोलॉजी (आई पी टी)

(पूर्व में सेंट्रल इंस्टिट्यूट ऑफ प्लास्टिक्स इंजीनियरिंग एण्ड टेक्नोलॉजी)
रसायन एवं पेट्रो-रसायन विभाग
रसायन एवं उर्वरक मंत्रालय, भारत सरकार
प्लॉट नं. 630, फेज 4, जी.आई.डी.सी., वटवा, अहमदाबाद-382445.
दूरभाष : (079) 40103900-902, फैक्स : (079)-40083905
ईमेल : cipetahmd@gmail.com, ahmedabad@cipet.gov.in
वेबसाईट : www.cipet.gov.in
मुख्यालय : सिपेट, गिण्डी, चेन्नै - 600 032



CIPET सि पेट
probe · perform · practice · Plastics



CIPET : INSTITUTE OF PETROCHEMICALS
TECHNOLOGY (IPT)

(Formerly Central Institute of Plastics Engineering & Technology)
Department of Chemicals & Petrochemicals
Ministry of Chemicals & Fertilizers, Govt. of India
Plot No. 630, Phase-IV, G.I.D.C., Vatva, Ahmedabad-382 445.
Tele.: (079) 40103900-902, Fax : (079) 40083905
E-mail: cipetahmd@gmail.com, ahmedabad@cipet.gov.in
Web. : www.cipet.gov.in
Head Office : CIPET, Guindy, Chennai - 600 032

प्लास्टिक्स परीक्षण केन्द्र / PLASTICS TESTING CENTRE

ANALYSIS REPORT

Report No.: 8493
Date : 12.10.2022

PART C
TEST RESULTS

Sr. no.	Name of the Test	Test Method/Standard	Unit	Results obtained	Specified requirements
5	Heavy metals concentrations # Arsenic (As) Copper (Cu) Nickel (Ni) Zinc (Zn) Cobalt (Co) Chromium (Cr) Molybdenum (Mo) Mercury (Hg) Cadmium (Cd) Lead (Pb) Selenium (Se)	IS 17088:2008	Mg/l	B.L.Q(Q.L=0.05) 11.78 9.35 33.16 B.L.Q(Q.L=0.05) 26.82 B.L.Q(Q.L=0.05) B.L.Q(Q.L=0.05) B.L.Q(Q.L=0.05) 11.14 B.L.Q(Q.L=0.05)	20 500 100 2500 ---- 300 ---- 10 20 500 ----

*Based on Municipal waste (Management and Handling) Rules, 1999 notified on 27th September, 1999 by Ministry of Environment and Forests, Government of India. Note that Concentration of Metals like Cobalt, Molybdenum, and Selenium is not mentioned in the notification.

PART D

REMARKS : Nil

Note :

1. This Test Report / Certificate is issued only for the samples submitted to the laboratory.
2. The results stated above related only to the items tested.
3. The quality of the subsequent production lot has to be ensured by the purchaser.
4. This Test Report shall not be reproduced except in full without the written approval of the laboratory.
5. Any anomaly/ discrepancy in this report should be brought to the notice of the laboratory within 30 days from the date of issue.
6. Subcontracted Tests (if any): # Gujarat Laboratory


AUTHORISED SIGNATORY

Dr. D. Thirumal
(Technical Officer)


AUTHORISED SIGNATORY

Page 3 of 10

Dr. Rajesh Pande
(Senior Technical Officer)

Head Office : CIPET, Guindy, Chennai - 600 032

सिपेट : इंस्टिट्यूट ऑफ पेट्रोकेमिकल्स
टेक्नोलॉजी (आई पी टी)

(पूर्व में सेंट्रल इंस्टिट्यूट ऑफ प्लास्टिक्स इंजीनियरिंग एण्ड टेक्नोलॉजी)
रसायन एवं पेट्रो-रसायन विभाग
रसायन एवं उर्वरक मंत्रालय, भारत सरकार
प्लॉट नं. 630, फेज 4, जी.आई.डी.सी., वटवा, अहमदाबाद-382445.
दूरभाष : (079) 40103900-902, फैक्स : (079)-40083905
ईमेल : cipetahmd@gmail.com, ahmedabad@cipet.gov.in
वेबसाईट : www.cipet.gov.in
मुख्यालय : सिपेट, गिण्डी, चेन्नै - 600 032



CIPET सि पेट
probe · perform · practice · Plastics



CIPET : INSTITUTE OF PETROCHEMICALS
TECHNOLOGY (IPT)

(Formerly Central Institute of Plastics Engineering & Technology)
Department of Chemicals & Petrochemicals
Ministry of Chemicals & Fertilizers, Govt. of India
Plot No. 630, Phase-IV, G.I.D.C., Vatva, Ahmedabad-382 445.
Tele.: (079) 40103900-902, Fax : (079) 40083905
E-mail: cipetahmd@gmail.com, ahmedabad@cipet.gov.in
Web. : www.cipet.gov.in
Head Office : CIPET, Guindy, Chennai - 600 032

प्लास्टिक्स परीक्षण केन्द्र / PLASTICS TESTING CENTRE

ANALYSIS REPORT

Report No.: 8493
Date : 12.10.2022

Annexure-I

OBSERVATION FOR BIODEGRADABILITY TEST AS PER IS /ISO 17088:2008

Customers Details:

Name of the Party :- NIKSHE MULTIPRODUCTS PVT LTD.

1. Sample Details : COMPOSTABLE PLASTIC (As declared by the party)
2. Material Identification by FTIR & DSC: Blends of Polylactic Acid (PLA)/
Polybutyleneadipate co-terephthalate (PBAT)

3. Observation:-

- a) Conditions of reaction mixtures
Origin of Compost : Livestock excreta, municipal and vegetable waste
Reaction Temperature : 58° (±2°C)
Dry Solid : 53.9 %
Volatile Solid : 38.8 %
CO₂ evolved during 1st 10 days
in blank vessels : 53.90 mg/g of volatile solids of compost
Test Duration : 112 Days.
Reference Material : Cellulose.
Volume of reaction vessel : 3000ml.
b) pH of Test medium

Sl. No.	Composting Vessel	pH (before test)	pH (after test)
1	Blank 1	7.9	8.0
2	Blank 2	8.1	7.5
3	Blank 3	8.0	8.2
4	Cellulose 1	8.3	8.0
5	Cellulose 2	8.0	8.1
6	Cellulose 3	8.1	7.6
7	Negative 1	7.6	7.5
8	Negative 2	7.9	8.1
9	Negative 3	8.0	8.2
10	Sample 1	8.4	8.5
11	Sample 2	7.8	8.2
12	Sample 3	7.4	7.1


AUTHORISED SIGNATORY
Kirti D. Trivedi
(Technical Officer)


AUTHORISED SIGNATORY
Page 4 of 10

सिपेट : इंस्टिट्यूट ऑफ पेट्रोकेमिकल्स
टेक्नोलॉजी (आई पी टी)

(पूर्व में सेन्ट्रल इंस्टिट्यूट ऑफ प्लास्टिक्स इंजीनियरिंग एण्ड टेक्नोलॉजी)
रसायन एवं पेट्रो-रसायन विभाग
रसायन एवं उर्वरक मंत्रालय, भारत सरकार
प्लॉट नं. 630, फेज 4, जी.आई.डी.सी., वटवा, अहमदाबाद-382445.
दूरभाष : (079) 40103900-902, फैक्स : (079)-40083905
ईमेल : cipetahmd@gmail.com, ahmedabad@cipet.gov.in
वेबसाइट : www.cipet.gov.in
मुख्यालय : सिपेट, गिण्डी, चेन्नै - 600 032



CIPET सि पेट
probe - perform - practice - Plastics



CIPET : INSTITUTE OF PETROCHEMICALS
TECHNOLOGY (IPT)

(Formerly Central Institute of Plastics Engineering & Technology)
Department of Chemicals & Petrochemicals
Ministry of Chemicals & Fertilizers, Govt. of India
Plot No. 630, Phase-IV, G.I.D.C., Vatva, Ahmedabad-382 445.
Tele.: (079) 40103900-902, Fax : (079) 40083905
E-mail: cipetahmd@gmail.com, ahmedabad@cipet.gov.in
Web. : www.cipet.gov.in
Head Office : CIPET, Guindy, Chennai - 600 032

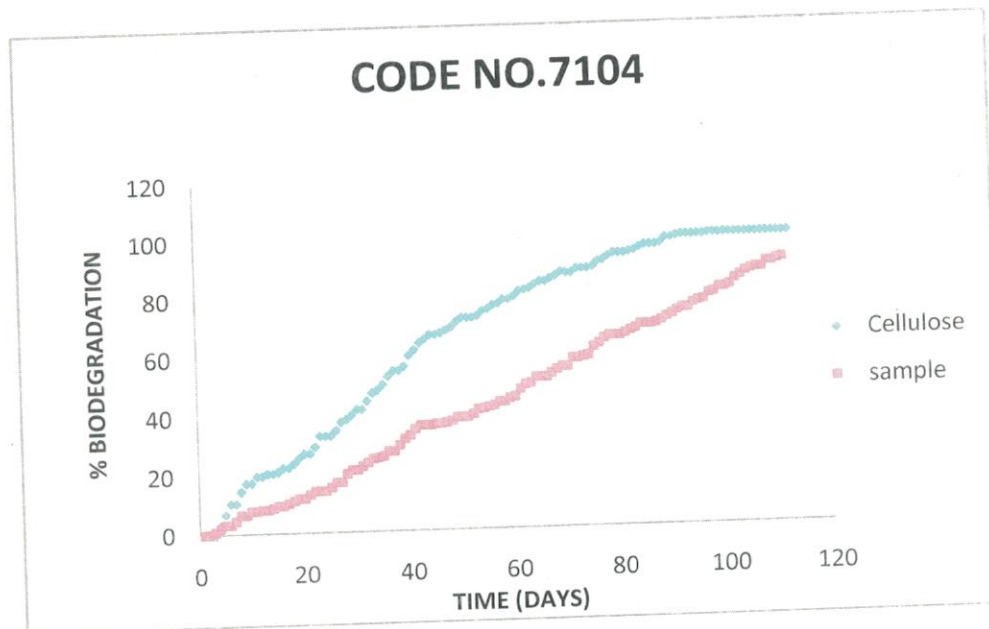
प्लास्टिक्स परीक्षण केन्द्र / PLASTICS TESTING CENTRE

ANALYSIS REPORT

Report No.: 8493
Date : 12.10.2022

4. Result : Percentage biodegradation relative to positive reference
MEAN (%) : 90.58 %

The reference material- Cellulose (%) : 100%



AUTHORISED SIGNATORY

Kirti D. Tripathi
(Technical Officer)

AUTHORISED SIGNATORY

Dr. Rajesh Pandey
(Technical Officer)

Page 5 of 10

Head Office : CIPET, Guindy, Chennai - 600 032

सिपेट : इंस्टिट्यूट ऑफ पेट्रोकेमिकल्स
टेक्नोलॉजी (आई पी टी)

(पूर्व में सेंट्रल इंस्टिट्यूट ऑफ प्लास्टिक्स इंजीनियरिंग एण्ड टेक्नोलॉजी)
रसायन एवं पेट्रो-रसायन विभाग
रसायन एवं उर्वरक मंत्रालय, भारत सरकार
प्लॉट नं. 630, फेज 4, जी.आई.डी.सी., वटवा, अहमदाबाद-382445.
दूरभाष : (079) 40103900-902, फैक्स : (079)-40083905
ईमेल : cipetahmd@gmail.com, ahmedabad@cipet.gov.in
वेबसाइट : www.cipet.gov.in
मुख्यालय : सिपेट, गिण्डी, चेन्नै - 600 032



CIPET सि पेट
probe • perform • practice • Plastics



CIPET : INSTITUTE OF PETROCHEMICALS
TECHNOLOGY (IPT)

(Formerly Central Institute of Plastics Engineering & Technology)
Department of Chemicals & Petrochemicals
Ministry of Chemicals & Fertilizers, Govt. of India
Plot No. 630, Phase-IV, G.I.D.C., Vatva, Ahmedabad-382 445.
Tele.: (079) 40103900-902, Fax : (079) 40083905
E-mail: cipetahmd@gmail.com, ahmedabad@cipet.gov.in
Web. : www.cipet.gov.in
Head Office : CIPET, Guindy, Chennai - 600 032

प्लास्टिक्स परीक्षण केन्द्र / PLASTICS TESTING CENTRE

ANALYSIS REPORT

Report No.: 8493
Date : 12.10.2022

5. Visual Observation of Sample

Description	Week 1	Week 5	Week 10	Week 15	Week 17
Structure	Film sample	Film sample	Film sample	Film sample	Film sample
Moisture	Adequate Moisture level	Adequate Moisture level	Adequate Moisture level	Adequate Moisture level	Adequate Moisture level
Colour	Milky white	Milky white	Milky white	Faded White	---
Fungal Development	Nil	Nil	Nil	Nil	Nil
Smell	Organic/dirt like	Organic/dirt like	Organic/dirt like	Organic/dirt like	Organic/dirt like

6. Visual Observation of Compost

Description	Week 1	Week 5	Week 10	Week 15	Week 20
Structure	Fine Particles	Fine Particles	Fine Particles	Fine Particles	Fine Particles
Moisture	Adequate moisture level	Adequate moisture level	Adequate moisture level	Adequate moisture level	Adequate moisture level
Colour	Dark Brown	Dark Brown	Dark Brown	Dark Brown	Dark Brown
Fungal Development	Nil	Nil	Nil	Nil	Nil
Smell	Organic/dirt like	Organic/dirt like	Organic/dirt like	Organic/dirt like	Organic/dirt like



AUTHORISED SIGNATORY-

Dr. D. Tripathi
(Technical Officer)



AUTHORISED SIGNATORY

Page 6 of 10

Dr. Rajesh Pandey
(Senior Technical Officer)

Head Office : CIPET, Guindy, Chennai - 600 032

सिपेट : इंस्टिट्यूट ऑफ पेट्रोकेमिकल्स
टेक्नोलॉजी (आई पी टी)

(पूर्व में सेन्ट्रल इंस्टिट्यूट ऑफ प्लास्टिक्स इंजीनियरिंग एण्ड टेक्नोलॉजी)
रसायन एवं पेट्रो-रसायन विभाग
रसायन एवं उर्वरक मंत्रालय, भारत सरकार
प्लॉट नं. 630, फेज 4, जी.आई.डी.सी., वटवा, अहमदाबाद-382445.
दूरभाष : (079) 40103900-902, फैक्स : (079)-40083905
ईमेल : cipetahmd@gmail.com, ahmedabad@cipet.gov.in
वेबसाईट : www.cipet.gov.in
मुख्यालय : सिपेट, गिण्डी, चेन्नै - 600 032



CIPET सि पेट
probe - perform - practice - Plastics



CIPET : INSTITUTE OF PETROCHEMICALS
TECHNOLOGY (IPT)

(Formerly Central Institute of Plastics Engineering & Technology)
Department of Chemicals & Petrochemicals
Ministry of Chemicals & Fertilizers, Govt. of India
Plot No. 630, Phase-IV, G.I.D.C., Vatva, Ahmedabad-382 445.
Tele.: (079) 40103900-902, Fax : (079) 40083905
E-mail: cipetahmd@gmail.com, ahmedabad@cipet.gov.in
Web. : www.cipet.gov.in
Head Office : CIPET, Guindy, Chennai - 600 032

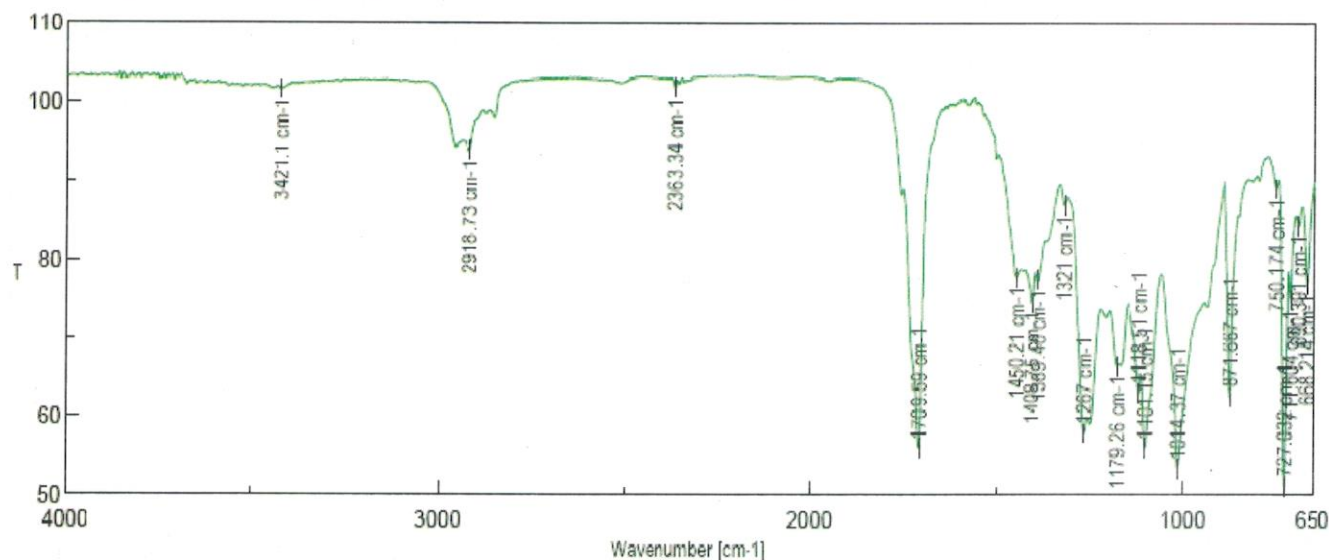
प्लास्टिक्स परीक्षण केन्द्र / PLASTICS TESTING CENTRE

ANALYSIS REPORT

Report No.: 8493
Date : 12.10.2022

7. FTIR Analysis

Sample Details : **COMPOSTABLE PLASTIC** (As declared by the party)



Wave number (cm ⁻¹)	Nature of Bond
1) 2918.73	N - H Stretching vibrations
2) 1709.59	C = O Stretching vibrations
3) 1267	C - N Stretching vibrations
4) 871.66	C - H Bending vibrations
5) 750.17	C - H Bending vibrations

AUTHORISED SIGNATORY
(Kirti D. Trivedi)
(Technical Officer)

AUTHORISED SIGNATORY

Page 7 of 10

Dr. Rajesh Pandey
(Senior Technician)

सिपेट : इंस्टिट्यूट ऑफ पेट्रोकेमिकल्स
टेक्नोलॉजी (आई पी टी)

(पूर्व में सेंट्रल इंस्टिट्यूट ऑफ प्लास्टिक्स इंजीनियरिंग एण्ड टेक्नोलॉजी)
रसायन एवं पेट्रो-रसायन विभाग
रसायन एवं उर्वरक मंत्रालय, भारत सरकार
प्लॉट नं. 630, फेज 4, जी.आई.डी.सी., वटवा, अहमदाबाद-382445.
दूरभाष : (079) 40103900-902, फैक्स : (079)-40083905
ईमेल : cipetahmd@gmail.com, ahmedabad@cipet.gov.in
वेबसाइट : www.cipet.gov.in
मुख्यालय : सिपेट, गिण्डी, चेन्नै - 600 032



CIPET सिपेट
probe · perform · practice · Plastics



CIPET : INSTITUTE OF PETROCHEMICALS
TECHNOLOGY (IPT)

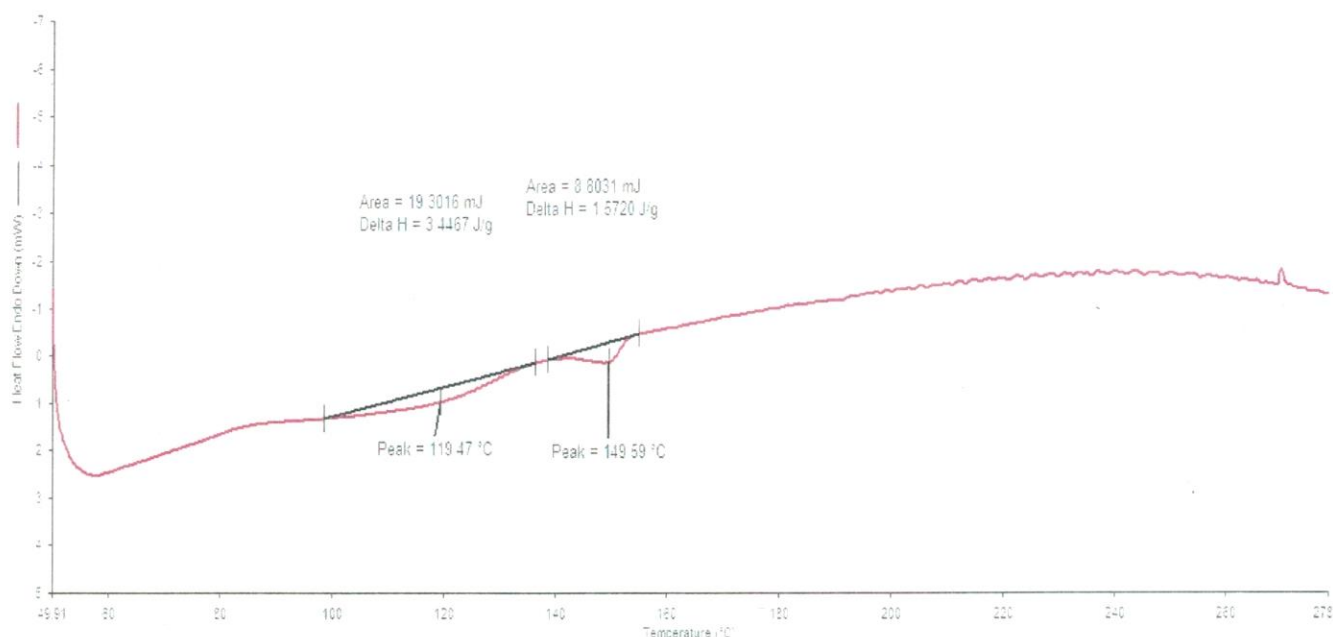
(Formerly Central Institute of Plastics Engineering & Technology)
Department of Chemicals & Petrochemicals
Ministry of Chemicals & Fertilizers, Govt. of India
Plot No. 630, Phase-IV, G.I.D.C., Vatva, Ahmedabad-382 445.
Tele.: (079) 40103900-902, Fax : (079) 40083905
E-mail: cipetahmd@gmail.com, ahmedabad@cipet.gov.in
Web. : www.cipet.gov.in
Head Office : CIPET, Guindy, Chennai - 600 032

प्लास्टिक्स परीक्षण केन्द्र / PLASTICS TESTING CENTRE

ANALYSIS REPORT

Report No.: 8493
Date : 12.10.2022

8. DSC Analysis



Comment: The above DSC & FTIR analysis indicates the above sample is Blends of
PLA(Polylactic Acid) / PBAT(Polybutylene Adipate co-terephthalate) Film

AUTHORISED SIGNATORY

Dr. D. D. Tripathi
(Technical Officer)

AUTHORISED SIGNATORY

Page 8 of 10

Dr. Rajesh Kumar
(Senior Technical Officer)

Head Office : CIPET, Guindy, Chennai - 600 032

**सिपेट : इंस्टिट्यूट ऑफ पेट्रोकेमिकल्स
टेक्नोलॉजी (आई पी टी)**

(पूर्व में सेंट्रल इंस्टिट्यूट ऑफ प्लास्टिक्स इंजीनियरिंग एण्ड टेक्नोलॉजी)
रसायन एवं पेट्रो-रसायन विभाग
रसायन एवं उर्वरक मंत्रालय, भारत सरकार
प्लॉट नं. 630, फेज 4, जी.आई.डी.सी., वटवा, अहमदाबाद-382445.
दूरभाष : (079) 40103900-902, फैक्स : (079)-40083905
ईमेल : cipetahmd@gmail.com, ahmedabad@cipet.gov.in
वेबसाइट : www.cipet.gov.in
मुख्यालय : सिपेट, गिण्डी, चेन्नै - 600 032



CIPET सि पेट
probe · perform · practice · Plastics



**CIPET : INSTITUTE OF PETROCHEMICALS
TECHNOLOGY (IPT)**

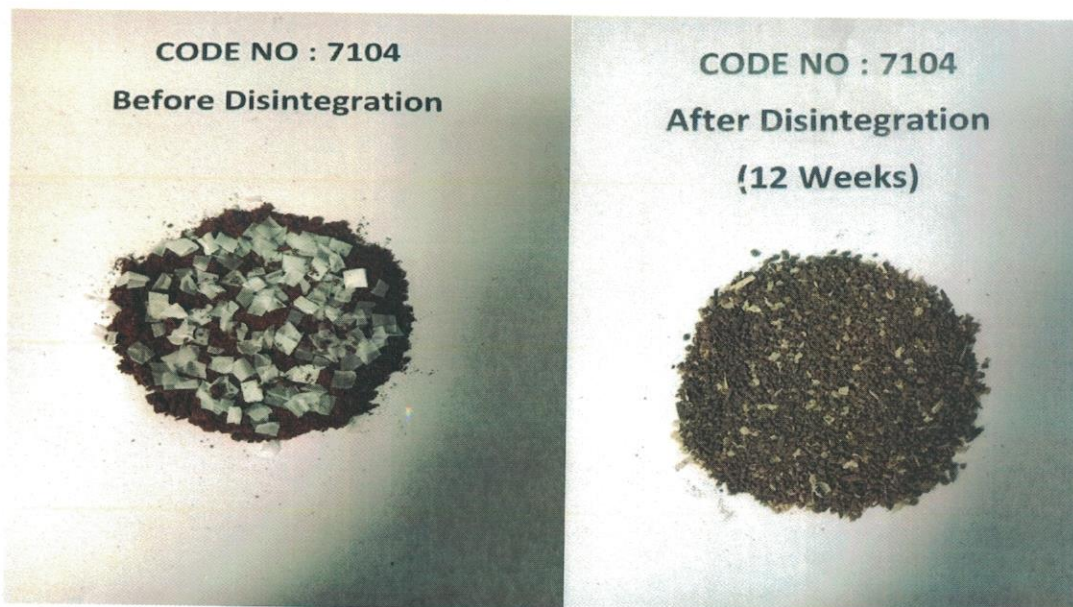
(Formerly Central Institute of Plastics Engineering & Technology)
Department of Chemicals & Petrochemicals
Ministry of Chemicals & Fertilizers, Govt. of India
Plot No. 630, Phase-IV, G.I.D.C., Vatva, Ahmedabad-382 445.
Tele.: (079) 40103900-902, Fax : (079) 40083905
E-mail: cipetahmd@gmail.com, ahmedabad@cipet.gov.in
Web. : www.cipet.gov.in
Head Office : CIPET, Guindy, Chennai - 600 032

प्लास्टिक्स परीक्षण केन्द्र / PLASTICS TESTING CENTRE

ANALYSIS REPORT

**Report No.: 8493
Date : 12.10.2022**

9. DISINTEGRATION - AFTER 12 WEEKS



BEFORE DISINTEGRATION

AFTER DISINTEGRATION

The disintegration of the sample by passing through 2 mm sieve after 12 week in composting condition as per ISO 17088-2012/IS 17088: 2008 was found not more than 10% of original dry mass remain.


AUTHORISED SIGNATORY

Dr. D. Thirumala
(Technical Officer)


AUTHORISED SIGNATORY

Page 9 of 10

Dr. Rajesh Kumar
(Technical Officer)

सिपेट : इंस्टिट्यूट ऑफ पेट्रोकेमिकल्स
टेक्नोलॉजी (आई पी टी)

(पूर्व में सेन्ट्रल इंस्टिट्यूट ऑफ प्लास्टिक्स इंजीनियरिंग एण्ड टेक्नोलॉजी)
रसायन एवं पेट्रो-रसायन विभाग
रसायन एवं उर्वरक मंत्रालय, भारत सरकार
प्लॉट नं. 630, फेज 4, जी.आई.डी.सी., वटवा, अहमदाबाद-382445.
दूरभाष : (079) 40103900-902, फैक्स : (079)-40083905
ईमेल : cipetahmd@gmail.com, ahmedabad@cipet.gov.in
वेबसाईट : www.cipet.gov.in
मुख्यालय : सिपेट, गिण्डी, चेन्नै - 600 032



CIPET सि पेट
probe - perform - practice - Plastics



CIPET : INSTITUTE OF PETROCHEMICALS
TECHNOLOGY (IPT)

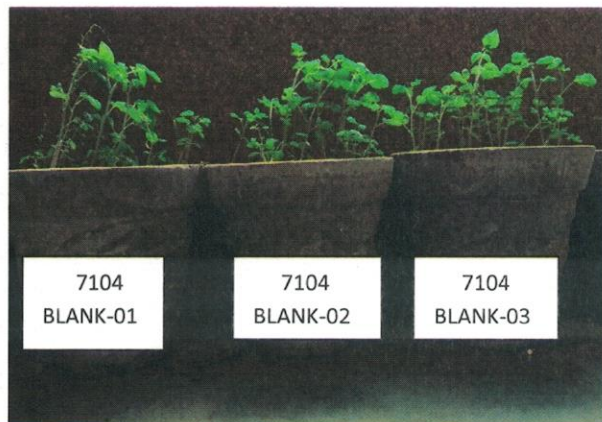
(Formerly Central Institute of Plastics Engineering & Technology)
Department of Chemicals & Petrochemicals
Ministry of Chemicals & Fertilizers, Govt. of India
Plot No. 630, Phase-IV, G.I.D.C., Vatva, Ahmedabad-382 445.
Tele.: (079) 40103900-902, Fax : (079) 40083905
E-mail: cipetahmd@gmail.com, ahmedabad@cipet.gov.in
Web. : www.cipet.gov.in
Head Office : CIPET, Guindy, Chennai - 600 032

प्लास्टिक्स परीक्षण केन्द्र / PLASTICS TESTING CENTRE

ANALYSIS REPORT

Report No.: 8493
Date : 12.10.2022

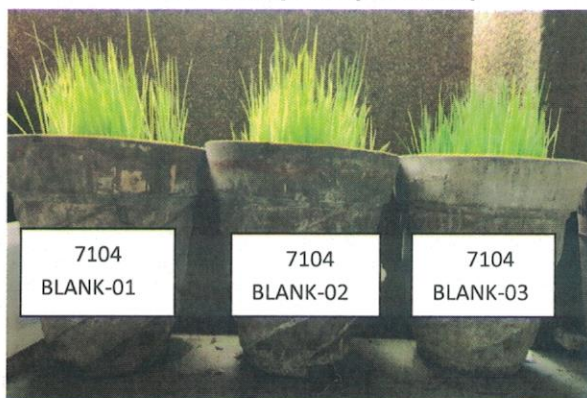
10. GERMINATION AND PLANT GROWTH STUDY



7104 Compost (Control)



7104 Compost (Sample)



7104 Compost (Control)



7104 Compost (Sample)

The percentage of seed germination rate if found to be greater than 90% for both Monocotyledon and Dicotyledon.

AUTHORISED SIGNATORY

Kirti D. Thirani
(Technical Officer)

AUTHORISED SIGNATORY

Page 10 of 10

Dr. Rajesh Panda
(Senior Technical Officer)