

सिपेट : एस. ए. आर. पि.-पॉलीमेरीक, मटेरीयल में अत्याधुनिक अनुसंधान हेतु प्रयोगशाला

रसायन एवं पेट्रोरसायन विभाग, रसायन एवं उर्वरक मंत्रालय, भारत सरकार

बी/२५, सि.एन.आई.कॉम्प्लेक्स, पटिआ, भुवनेश्वर-751024, ओडिशा

CIPET : SARP - LABORATORY FOR ADVANCED RESEARCH IN POLYMERIC MATERIALS



CIPET सि पेट
probe - perform - practice - Plastics

Dept. of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers, Govt. of India

B/25, C.N.I. Complex, Patia, Bhubaneswar-751 024, Odisha

Ph : 0674 - 2742852, 2740173, Fax : 0674 - 2740463

E-mail : larpm@cipet.gov.in, Web : www.larpm.gov.in

CERTIFICATE OF ANALYSIS AS PER IS/ISO 17088:2008/ISO 17088:2012

LARPM/CIPET/Testing/2022-23/

Date-17.08.2022

To,

M/s. Ecolastic Products Pvt Ltd

Plot No.35/2, Phase 1, IDA, Cherlapalli,

Hyderabad, Telangana-500051

Sub -Test Report-Reg.

Dear Sir,

Ref No : 1) SSF dated 16.12.2021 & email dated 15.12.2021

2) Our Work Order No.: LARPM/BBS./2021-22/138 dated 24.12.2021

With reference to the above, the submitted sample was analyzed as per IS/ISO 17088:2008/ISO 17088:2012. The summary detail of testing & analysis is given below:

Company Name & Address	: M/s. Ecolastic Products Pvt Ltd Plot No.35/2, Phase 1, IDA, Cherlapalli, Hyderabad, Telangana-500051
Sample Details	: "Compostable Film", Sample ID: Ecolastic Film- as stated by the party
Test Report No	: 00612 & dated 17.08.2022
Date of Receipt of sample	: 24.12.2021
Date of Initiation	: 18.01.2022
Date of Completion	: 17.08.2022
Percentage of Compostability	: 91.47
In 130 days	
Requirement of Compostability in	: 90 %
180 days as per IS/ISO 17088:2008/ ISO 17088:2012	

The film sample submitted by M/s. Ecolastic Products Pvt Ltd is compostable and the percentage of Compostability in 130 days reported vide test report No. 00612 is 91.47%.

The submitted sample also complies with the terms of Compostability, seed germination and disintegration as per IS/ISO 17088:2008/ISO 17088:2012.

Thanks & Regards,


Authorized Signatory

Encl : Analysis Report



ANALYSIS REPORT

Report No. : 00612

Date : 17.08.2022

Issued to

M/s. Ecolastic Products Pvt Ltd

Plot No.35/2, Phase 1, IDA, Cherlapalli,

Hyderabad, Telangana-500051

Customer Ref. No. & Date : SSF dated 16.12.2021 & email dated 15.12.2021

Work order Ref. No. & Date : LARPM/BBS./2021-22/138 dated 24.12.2021

As per Standard : As per part C

PART A: PARTICULARS OF SAMPLE SUBMITTED

- | | |
|--|---|
| a) Name of the Sample | : Compostable Film -as stated by the party |
| b) Grade/verity/Type/Size/Class etc. | : Film Sample – as supplied by the party. |
| c) Code No. | : Ecolastic Film - as stated by the party. |
| d) Quantity (pcs./mtr/gm/nos) | : 1 Kg |
| e) Mode of packing
(Sealed carton/polypouch/container or not) | : Packed in Carton. |
| f) Date of receipt of sample | : 24.12.2021 |
| g) Date of Performance of test | : 24.12.2021-17.08.2022 |
| h) Any other information | : NIL. |

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- | : Nil |


Mr. Pinaki Chatterjee
AUTHORISED SIGNATORY


Dr. Akshaya Kumar Palai
AUTHORISED SIGNATORY



PART C: TEST RESULTS

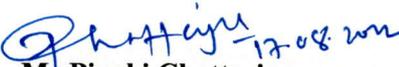
ANALYSIS REPORT

Report No : 00612

Date : 17.08.2022

Sl. No	Name of the Test	Test Method/Standard	Unit	Results Obtained	Specified Requirements
Sample Details: "Compostable Film", Sample ID: Ecolastic Film - as stated by the party					
1.	Material Identification	FTIR/DSC	--	Starch based Polybutylene adipate terephthalate (PBAT) material	---
2.	Disintegration (Dry mass remains in 2 mm sieve after 84 days)	ISO 17088:2012 / IS/ISO 17088:2008	%	7.78	No more than 10% of original
3.	Ultimate aerobic Biodegradation (with reference to 100% degradation of positive reference)	ISO 17088:2012 / IS/ISO 17088:2008	%	91.47 (at the end of 130 days)	> 90 (at the end of the test period not more than 180 days.)
4.	Plant Growth study a) Monocotyledon (Rice) % Seed Emergence b) Dicotyledon (Mungo) % Seed Emergence	ISO 17088:2012 / IS/ISO 17088:2008	% %	96.61 95.32	> 90 > 90

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


Mr. Pinaki Chatterjee
AUTHORISED SIGNATORY


Dr. Akshaya Kumar Palai
AUTHORISED SIGNATORY