## केंद्रीय पेट्रोरसायन अभियांत्रिकी एवं प्रौघोगिकी संस्थान (सिपेट)

(पूर्व में केंद्रीय प्लास्टिक्स इंजीनियरिंग एवं तकनीकी संस्थान) कौशल एवं तकनीकी सहायता केन्द्र (सी.एस.टी,एस.) रसायन और पेट्रोरसायन विभाग रसायन एवं उर्वरक मंत्रालय, भारत सरकार

सरवे नं-३७७, सूरमपल्ली (वि), गन्नावरम (म)

विजयवाडा - ५२१ २१२, कृष्णा जिला

फोन : 0866 - 2951466. वेबसाइट : www.cipet.gov.in ई-मेल : vijayawada@cipet.gov.in मुख्यालय : गिण्डी, चेन्नई - 600 032.

डी, चेन्नई - 600 032. CIPET/VIJAYAWADA/PTC/ 2024-25/ २२)







## CENTRAL INSTITUTE OF PETROCHEMICALS ENGINEERING & TECHNOLOGY (CIPET)

(Formerly Central Institute of Plastics Engineering & Technology)

CENTRE FOR SKILLING & TECHNICAL SUPPORT (CSTS)

Department of Chemicals & Petrochemicals

Ministry of Chemicals & Fertilizers, Govt. of India

Survey No. 377, Surampalli (V), Gannavaram (M),

Viiayawada - 521 212, Krishna District

Phone : 0866 - 2951466 Web : www.cipet.gov.in

E-mail : vijayawada@cipet.gov.in Head Office : Guindy, Chennai - 600 032.

Date: 08.11.2024

To.

M/s. Vardhans Green Bags, Plot.No.154/A7, Reddys Lab, CTO-1 Road, IDA Bolloram, Hyderabad, Telangana 502325

Sub: Interim Report – Reg

Ref: Letter No. Nil Dated. 22.04.2024

Dear Sir,

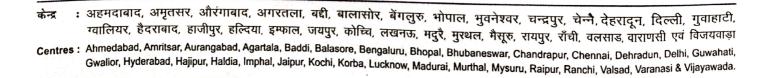
With reference to the above cited subject, we are enclosing herewith the Test Report No. 003631 Dated 08.11.2024

Thanking you and assuring our best services at all times.

Yours Sincerely,

Dr. Ch. Shekar Director & Head

Encl: As above.



## केंद्रीय पेट्रोरसायन अभियांत्रिकी एवं प्रौघोगिकी संस्थान (सिपेट)

(पूर्व में केंद्रीय प्लास्टिक्स इंजीनियरिंग एवं तकनीकी संस्थान) कौशल एवं तकनीकी सहायता केन्द्र (सी.एस.टी,एस.) रसायन और पेट्रोरसायन विभाग

रसायन एवं उर्वरक मंत्रालय, भारत सरकार सरवे नं-३७७, सूरमपही (वि), गन्नावरम (म)

विजयवाडा - ५२१ २१२, कृष्णा जिला

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**ENGINEERING & TECHNOLOGY (CIPET)** (Formerly Central Institute of Plastics Engineering & Technology) CENTRE FOR SKILLING & TECHNICAL SUPPORT (CSTS) Department of Chemicals & Petrochemicals Ministry of Chemicals & Fertilizers, Govt. of India

Date: 08.11.2024

CENTRAL INSTITUTE OF PETROCHEMICALS

Survey No. 377, Surampalli (V), Gannavaram (M), Vijayawada - 521 212, Krishna District

Phone: 0866 - 2951466 Web: www.cipet.gov.in

E-mail: vijayawada@cipet.gov.in

Head Office: Guindy, Chennai - 600 032.

INTERIM REPORT

CIPET/CSTS: Vijayawada/IR-BDR/TR No.3631

Name & Address of the party: M/s. Vardhans Green Bags,

Plot.No.154/A7, Reddys Lab, CTO-1 Road, IDA Bolloram, Hyderabad, Telangana 502325

Sample Details: Biodegradable and Compostable Bio films (as declared by the party)

Date of Receipt sample

: 15/05/2024

Date of performance of test : 07/06/2024 to 08/11/2024					
Sl.No	Property	Testing Method	Unit	Result	Specified
		Standard		Obtained	Requirement
1	Material Identification	FTIR/DSC	-	Poly(butylene	-
				adipate-co-	
				terephthalate)	
				(PBAT)	
2	Disintegration	CI.6.2 of IS/ISO	%	9.14	Not more than
	(Dry mass remains in	17088-2021			10% of its
	2mm sieve after 84 days)				original dry mass
3	Ultimate aerobic	CI.6.3 of IS/ISO	%	90.24	>90% (At the
	biodegradation (with	17088-2021/			end of the test
	reference to 100%	ISO:14855-1			period not more
	degradation of positive				than 180 days)
	reference)				,

Comments: The submitted Biodegradable and compostable Bio film (as stated by the party) complies with the requirements of CI.6.2 & 6.3 of ISO 17088-2021 Note:

- 1. The submitted sample is exposed under controlled compost condition as per ISO 14855-1 and at the end of 154 days, the cumulative biodegradation is estimated as 90.24% with reference to the degradation of the cellulose(positive reference)
- 2. The following tests are under progress as per the standard ISO 17088-2021
  - a. Plant growth test as per CI.6.4.3
  - b. Earthworm toxicity test as per Cl.6.4.4 and 6.4.5
  - c. Heavy metal analysis as per Cl.6.5.2
- 3. The Test report will be issued after the completion of all the tests.
- 4. The interim report is only valid till the issue of test report.

K K Rao Reviewed By / Authorized Signatory

Dr.Ch. Shekar **Authorized Signatory** 

ः अहमदाबाद, अमृतसर, औरंगाबाद, अगरतला, बदी, बालासोर, बेंगलुरु, भोपाल, भुवनेश्वर, चन्द्रपुर, चेन्नै, देहरादून, दिल्ली, गुवाहाटी, ग्वालियर, हैदराबाद, हाजीपुर, हिल्दया, इम्फाल, जयपुर, कोच्चि, लखनऊ, मदुरै, मुरथल, मैसूरु, रायपुर, राँची, वलसाड, वाराणसी एवं विजयवाड़ा

Centres: Ahmedabad, Amritsar, Aurangabad, Agartala, Baddi, Balasore, Bengaluru, Bhopal, Bhubaneswar, Chandrapur, Chennai, Dehradun, Delhi, Guwahati, Gwalior, Hyderabad, Hajipur, Haldia, Imphal, Jaipur, Kochi, Korba, Lucknow, Madurai, Murthal, Mysuru, Raipur, Ranchi, Valsad, Varanasi & Vijayawada.

