



Certificate No.- CPCB-UPC-II/GREEN DOT BIOPAK/Gujarat/443

Dated: 09.08.2023

To,

M/s GREEN DOT BIOPAK

Godown no.1, Block no.197/Paiki, Joshi Estates,
Bh. Bhagyoday Hotel, Near Siddhi oil mill,
Canal Road Sarkhej- Bawla Highway,
Changodar, Ahmedabad, Gujarat, 382213

Sub: Certificate to manufacturer for Manufacturing / Selling of Compostable Carry Bags and Commodities.

With reference to the application no. GREEN DOT BIOPAK/Gujarat/443 dated 09 Aug 2023 this is to certify that M/s GREEN DOT BIOPAK plant located at Godown no.1, Block no.197/Paiki, Joshi Estates, Bh. Bhagyoday Hotel, Near Siddhi oil mill, Canal Road Sarkhej- Bawla Highway, Changodar, Ahmedabad, Gujarat, 382213 is fulfilling the criteria as per revised Standard Operating Procedure (SOP) for issuing certificate as per the provisions '4(h)'&'11(c)' of Plastic Waste Management Rules, 2018, for manufacturing and selling of compostable carry bags and commodities in Indian Market as 'MANUFACTURER'.

Certificate for manufacturing and selling of compostable plastic bags and commodities in Indian market is hereby issued to M/s GREEN DOT BIOPAK plant located at Godown no.1, Block no.197/Paiki, Joshi Estates, Bh. Bhagyoday Hotel, Near Siddhi oil mill, Canal Road Sarkhej- Bawla Highway, Changodar, Ahmedabad, Gujarat, 382213 as 'MANUFACTURER' with the following conditions:

- i. The end product "Compostable plastics" shall be manufactured using the raw materials "PLA, PBAT" and following the production process (Annexure I).
- ii. Each carrybag and commodities made from compostable material or plastic shall bear a label "COMPOSTABLE" IS/ISO:17088 titled as Specifications for "Compostable Plastic" in English & regional language. Each carrybag and commodities shall also have printed code and Certificate Number of "MANUFACTURER"
- iii. The manufacturer shall generate QR code based on the details (Name, plant address, CPCB certificate no. etc.) provided in the certificate issued by CPCB and QR code shall be provided on each of the carry bag and commodities manufactured at the certified unit. The "verifiable" details of the QR code shall be shared with the SPCB/PCC/CPCB within one month of issue of this Certificate.
- iv. This certificate issued by CPCB shall not require renewal. However, a fresh application shall be filed with CPCB for grant of certificate, in case there is any change in raw material/ production process or product.

Dy

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‘परिवेश भवन’ पर्वी अर्जुन नगर, दिल्ली-110032

Parivesh Bhawan, East Arjun Nagar, Delhi-110032

दूरभाष/Tel : 43102030, 22305792, वेबसाईट/Website : www.cpcb.nic.in

- v. The Manufacturer shall provide six-monthly report giving details of raw material procurement and product sale to SPCB/PCC/CPCB as per the prescribed format.
- vi. The "Manufacturer" shall comply with provisions of PWM Rules / Guidelines issued from time to time by the Ministry of Environment, Forest & Climate Change or Central Pollution Control Board.
- vii. If the certified Manufacturer is found non-complying with the provisions of the PWM Rules, 2018, the Certificate shall stand cancelled



(Divya Sinha)
Director & I/c UPC-II

दिव्या सिन्हा / Divya Sinha
वैज्ञानिक 'एफ' / Scientist 'F'
केंद्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
(पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार)
(Mo Environment, Forest & Climate Change, Govt. of India)
परिवेश भवन, पूर्वी अरुन नगर, दिल्ली-110032
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सिपेट : स्कूल फार एडवांस्ड
रिसर्च इन पेट्रोकेमिकल्स (एस. ए. आर. पी)
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CIPET : SCHOOL FOR ADVANCED
RESEARCH IN PETROCHEMICALS (SARP)-
ADVANCED POLYMER DESIGN & DEVELOPMENT
RESEARCH LABORATORY (APDDRL)

Dept. of Chemicals & Petrochemicals,

Ministry of Chemicals & Fertilizers, Govt. of India

Plot No. 7P. Hi Tech Defence and Aerospace Park

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Head Office : CIPET, Guindy, Chennai - 600032



ANALYSIS REPORT

Page: 01 of 03

Report No.: 23865 (Final)

Date: 06.05.2024

Issued to

M/s GreenDot Biopak

A/103, Mondeal Heights, S.G. Highway,

Ramadev Nagar, Ahmedabad,

Gujarat- 380015

Ref. No

1) Letter Ref No. GDB/CIPET 10 /23 and Letter dtd 03.10.2023

2) Interim Test Report No. 23865 dated 11.03.2024

PART A: PARTICULARS OF SAMPLE SUBMITTED

- a) Name of the Sample : **“Green.coat EcoEmulsion” grade water based solution coated cellulose paper board – As stated by the party**
- b) Grade/variety/Type/Size/Class etc. : **Paper sample – as supplied by the party**
- c) Code No. : **NA**
- d) Quantity (pcs./mtr/gm/nos) : **1.5 kg.**
- e) Mode of packing
(Sealed carton/Polypouch/Container or not): **Envelop**
- f) Date of receipt of sample : **09.10.2023**
- g) Date of Performance of test : **14.10.2023 to 29.04.2024**
- 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**

Ag
06/05/2024

John
06.05.2024

केन्द्र : अहमदाबाद, अमृतसर, औरंगाबाद, अगरतला, बही, बालासोर, बेंगलुरू, भोपाल, भुवनेश्वर, चन्द्रपुर, चेन्नै, देहरादून, गुरुग्राम, गुवाहाटी, ग्वालियर, हैदराबाद, हाजीपुर, हल्दिया, इम्फाल, जयपुर, कोच्चि, कोरबा, लखनऊ, मद्राई, मुरथल, मैसूरु, रायपुर, राँची, बलसाड एवं विजयवाडा

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

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सिपेट CIPET



Azadi Ka
Amrit Mahotsav



G20
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ONE EARTH • ONE FAMILY • ONE FUTURE

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Date: 06.05.2024



ANALYSIS REPORT

PART-C					
Test Result					
Sl. No.	Name of test	Test Method	Unit	Test Result	Specified requirements
01	Material Identification	FTIR / DSC	--	Acrylic based one side coated paper	--
02	Disintegration (Dry mass remains in 2mm sieve after 84 days)	Cl. 6.2 of ISO 17088 : 2021	%	8.43	Not more than 10
03	Ultimate aerobic Biodegradation (with reference to 100% degradation of positive reference)	Cl. 6.3 of ISO 17088 : 2021	%	92.42 (At the end of 137 days)	>90% (At the end of the test period not more than 180 days)
04	Plant Growth study Monocotyledon % Seed emergence	Cl 6.4.3 ISO 17088 : 2021	%	92	>90
	Dicotyledon % Seed emergence		%	94.66	>90
05	Acute Ecotoxic Effects of Earthworm				
a	Survival of adult earthworm at the end of 7 days	Cl.No.6.4.4 of ISO 17088 : 2021	%	100	Shall be more than 90
b	Survival of adult earthworm at the end of 14 days		%	100	Shall be more than 90
c	Biomass end of the 14 days		%	99	Shall be more than 90
06	Chronic ecotoxic effects to earthworm				
a	Survival of adult earthworm at the end of 28 days	Cl.No.6.4.5 of ISO 17088 : 2021	%	98	Shall be more than 90
b	Offspring at the end of 56 days		%	95	Shall be more than 90
c	Biomass end of the 56 days		%	97	Shall be more than 90

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

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ANALYSIS REPORT

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Sl. No	Name of the Test	Test Method/Standard	Unit	Specified Requirements	Results Obtained
07.	Heavy metals concentration				
	Arsenic (As)	Cl. No. 6.5.2 of ISO 17088:2021 AAS	ppm	10	0.0000
	Copper (Cu)			300	2.7924
	Nickel (Ni)			50	0.0786
	Zinc (Zn)			1000	1.6349
	Chromium (Cr)			50	0.4816
	Molybdenum (Mo)			--	0.0025
	Mercury (Hg)			0.15	0.0019
	Cadmium (Cd)			5	0.0006
	Lead (Pb)			100	0.0200
Selenium (Se)	--			0.0015	

*BDL-Below Detection Limit

Based on solid waste management Rules, 2016 notified on 8th April 2016 by Ministry of Environment and Forests, Government of India.

PART D: REMARKS: NIL

Note:

1. This Test Report / Certificate is issued only for the samples submitted to CIPET: SARP-APDDRL.
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 CIPET: SARP-APDDRL within 30 days from the date of issue.
6. Sub contracted Tests (if any): Heavy metals concentration

** End of the Report **

Reviewed By
Dr. V H Sangeetha
Scientist

Authorized By
Dr. Manoranjan Biswal
Sr. Scientist

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