

### खीराबर खना विख्यान

## বাংলাদেশ বিজ্ঞান ও শিল্প গবেষণা পরিষদ (বিসিএসআইআর) BANGLADESH COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH (BCSIR)

# Laboratories/ Institute/ Center: BCSIR Laboratories, Dhaka ANALYSIS REPORT

ASC Ref No	:D-1053, dt: 21.11.2024	Unit (Lab/Ins.) Ref No	:	1053
Lab Sample ID	:FPRD/A-2999	Number of Sample	:	1 (One)
Sample Description	: Test for Supplied Sample (Polka Bio-plastic).	Test Commencement Date		21/11/2024
Client's Details	:Mahabub Sumon Shalbrikkho Limited Kaiumpur, Narayangonj.	Test Completion Date		10/12/2024
Ref. No.	: Nil	Date: 30/10/2024		

#### Details-

Sl. No	Parameter	Method	Unit	Results	
01.	Physical State	In-house	Apparent	Fibre reinforced composite	
02.	Burning feature / properties	In-house	-	Burning like cellulose fibre	
03.	Test for polystyrene (PS)	In-house	Presence	Absent	
04.	Test for polyethylene (PE)	In-house	Presence	Absent	
05.	Test for propylene (PP)	In-house	Presence	Absent	
06.	Test for cellulose / starch	In-house	Presence	Present	
07.	Content of Composite / Carbohydrate (Cellulose, starch)	In-house	%	97.00	
08.	Content of other fibre (as impurities)	In-house	%	≤ 3.0	
09.	Identification of polymer	FT-IR	cm <sup>-1</sup>	3319, 2922, 2354, 1713, 1405, 1339, 1241, 1153, 1080, 1018, 1000, 872, 846, 722, 652	

Comments- The supplied sample does not contain polystyrene (PS), polyethylene (PE) or propylene (PP) plastics. FT-IR & other data show that the composite sample complies with the standard FT-IR spectrum of carbohydrates (i.e., cellulose / starch).

Analyst

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#### Notes:

The results reported here pertained to the sample(s) received in this laboratory only

Complain and/or query regarding test report(s) should be lodged within one month of report delivery date. 2

The laboratory is not responsible for the data quality affected due to sampling, transporting and storage conditions of the sample(s) maintained before received in the laboratory

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