

FIFA TEST REPORT

Football Turf system

Product type	Football Turf system
Product name	Greenfields Pure PT
System type	Non-Filled
Infill type	None
FIFA Licensee	Greenfields B.V.
Test Institute	IGOID Group
Test Number	149115
External Reference No.	03-199262005
Date of tests completion	29.05.2026
Test Result	Passed
Quality Level	FIFA Quality
Test Manual	TM Football Turf 2024

INTRODUCTION

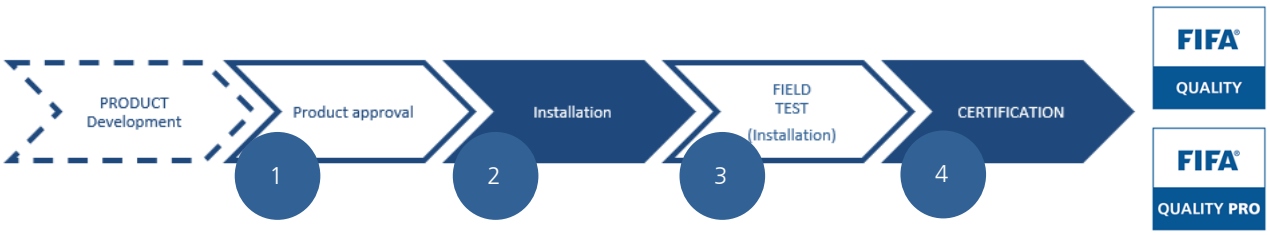
The FIFA Quality Programme for Football Turf is a certification initiative designed to ensure that artificial turf products meet rigorous test standards. This comprehensive program involves rigorous assessments of Football Turf installations (pitches) by FIFA accredited test institutes, following a standardized procedure.

Products listed under this quality programme represent technology readily available in the market. They have already demonstrated their quality, meeting international standards across various criteria such as durability, performance, safety, including player-surface interaction and ball-surface interaction. Manufacturers granted licenses within this program demonstrated their expertise in artificial turf production and field installations. To facilitate the selection of licensed manufacturers, FIFA recommends consulting the list available in our resource hub here.

The true value of this programme lies in its quality control process, which follows the complete path from the manufacturer's product declaration to the approval of the Football Turf system and ultimately the validation of the Football Turf installation. All auditing and testing processes are conducted by independent accredited test institutes. This process goes beyond a product audit report; it extends to the assessment of the installation, validated through a FIFA installation test report. By ensuring compliance and quality at every step, the FIFA Quality Programme for Football Turf guarantees top performance standards for Football Turf installations.

FIFA recommends the **FIFA Quality** certifications for recreational, community and municipal football pitches, with typically 40-60 playing hours per week.

FIFA recommends the **FIFA Quality Pro** certification for pitches that require elevated standards of performance and safety for professional football.



Competition Regulations on Approved Playing Surfaces

According to the Laws of the Game, "the field of play must be a wholly natural or, if competition rules permit, a wholly artificial playing surface, or an integrated combination of artificial and natural materials (hybrid system)." Competition rules are set by the organising bodies of leagues and cup competitions, including FIFA, continental football federations, national football associations, and local football associations. When artificial playing surfaces are allowed, the competition rules will specify the category of FIFA field certification required (FIFA Quality Pro, FIFA Quality, or FIFA Basic). They may also impose restrictions on the types of football turf that can be used.

Disclaimer on climatic conditions

The tests in this laboratory test report are representative of typical temperate climates with normal precipitation levels. For fields installed in areas that may be subject to more severe or extreme weather conditions, it is recommended to seek further information from local football associations or technical guidelines relating to the construction of sports fields.

This FIFA TEST REPORT may not be altered in any way. Any change of this report is a violation of the report's copy right which is held by FIFA and breaches the terms of the FIFA Quality Programme for Footballs licensing agreement.

Declaration of conformity		
This report details the tests carried out in accordance with the test methods of the FIFA Quality Programme for Football Turf Test Manual and lists the test results. For further information about the exact test procedure, please refer to the latest version of the Test Manual.		
Technician	Manuel León	Leonor Gallardo
Date	29.05.2026	29.05.2026

TEST RESULTS SUMMARY

Name	Comment	Result
L001 - Summary		
PD - Football Turf system name	Manufacturer's Declaration :	Greenfields Pure PT
Turf System Type		Non-Filled
Product identification – Category of performance infill - Result		None
Is this report an amendment to an existing report (declaration or test result update)?		No
PD - Carpet name and FIFA report reference	Manufacturer's Declaration :	Greenfields Pure PT - 147778
PD - Carpet mass per unit area (g/m²)	Manufacturer's Declaration :	5271.00
PD - Number of tufts/m²	Manufacturer's Declaration :	26250
PD - Stitch spacing / Gauge (mm)		9.52
PD - Minimum turf withdrawal force (N)	Manufacturer's Declaration :	40.00
PD - Fibre length above backing (mm)	Manufacturer's Declaration :	38.00
PD - Total Fibre weight (g/m²)	Manufacturer's Declaration :	3898.00
PD - Total detex	Manufacturer's Declaration :	(1250 x 3) + (1250 x 3) + (750 x 6) + (750 x 6) = 16500
Does the Football Turf system contains fibres with recycled content (with valid report)?	Manufacturer's Declaration :	No
PD - Fibre thickness (µm)	Manufacturer's Declaration :	140
PD - Fibre depth (µm)	Manufacturer's Declaration :	150
PD - Fibre width (mm)	Manufacturer's Declaration :	0.89
PD - Fibre detex	Manufacturer's Declaration :	1250
PD – Fibre 2 thickness (µm)	Manufacturer's Declaration :	140.00
PD – Fibre 2 depth (µm)	Manufacturer's Declaration :	150.00
PD – Fibre 2 width (mm)	Manufacturer's Declaration :	0.890
PD – Fibre 2 detex	Manufacturer's Declaration :	1250.00
PD – Fibre 3 thickness (µm)	Manufacturer's Declaration :	218.00

Name	Comment	Result
PD – Fibre 3 depth (µm)	Manufacturer's Declaration :	218.00
PD - Fibre 3 width (mm)	Manufacturer's Declaration :	0.660
PD – Fibre 3 detex	Manufacturer's Declaration :	750.00
PD – Fibre 4 thickness (µm)	Manufacturer's Declaration :	231.000
PD – Fibre 4 depth (µm)	Manufacturer's Declaration :	231.00
PD - Fibre 4 width (mm)	Manufacturer's Declaration :	0.61
PD – Fibre 4 detex	Manufacturer's Declaration :	750.00
PD - Stabilising infill name and FIFA report reference	Manufacturer's Declaration :	N/A
PD – Stabilising infill Particle size (d) in mm	Manufacturer's Declaration :	0.000
PD – Stabilising infill Particle size (D) in mm	Manufacturer's Declaration :	0.000
PD – Stabilising infill Particle shape	Manufacturer's Declaration : Angular/Irregular/Rounded	N/A
PD – Stabilising infill Particle sphericity	Manufacturer's Declaration : Low/Medium/High	N/A
PD – Stabilising infill Bulk density (g/cm^3)	Manufacturer's Declaration :	0.00
PD – Stabilising infill Application rate (kg/m²)	Manufacturer's Declaration :	0.00
PD – Performance infill name and FIFA report reference	Manufacturer's Declaration :	Tencate Non Infill - 149111
PD – Performance infill Particle size (d) in mm	Manufacturer's Declaration :	0.000
PD – Performance infill Particle size (D) in mm	Manufacturer's Declaration :	0.000
PD – Performance infill Particle shape	Manufacturer's Declaration : Angular/Irregular/Rounded	N/A
PD – Performance infill Particle sphericity	Manufacturer's Declaration : Low/Medium/High	N/A
PD – Performance infill Bulk density (g/cm^3)	Manufacturer's Declaration :	0.00
PD – Performance infill Application rate (kg/m²)	Manufacturer's Declaration :	0.00
L002 - Football Turf system characteristics		
PC – Identification tests of the carpet	Within tolerance as per the FIFA Test Manual	Passed
PC – Identification tests of the fibres	Within tolerance as per the FIFA Test Manual	Passed
Total infill thickness - Lisport - FIFA TM 2024-19 - dry (mm)	No requirement, intended for technical analysis purposes.	0

Name	Comment	Result
Total infill thickness - Lisport - FIFA TM 2024-19 - Simulated wear (mm)	No requirement, intended for technical analysis purposes.	0
PC - Complete system permeability - FIFA TM 2024-20 – (mm/h)	> 180 mm/h	7672
PC - Vertical ball Rebound - FIFA TM 2024-01 – dry (m)	0.60-1.00m	0.65
PC - Vertical ball Rebound - FIFA TM 2024-01 – wet (m)	0.60-1.00m	0.65
PC - Vertical ball Rebound - FIFA TM 2024-01 – Simulated wear (m)	0.60-1.00m	0.85
PC - Angle ball rebound - FIFA TM 2024-14 – dry (%)	45-70%	46.00
PC - Angle ball rebound - FIFA TM 2024-14 – wet (%)	45-80%	46.00
PC - Angle ball rebound - FIFA TM 2024-14 - Relative increase dry/wet (%)	≤40% relative	0.00
PC - Reduced ball roll - FIFA TM 2024-02a – dry (m)	4.0-10.0m	7.80
PC - Reduced ball roll - FIFA TM 2024-02a - Simulated wear dry (m)	4.0-12.0m	7.80
PC - Reduced ball roll - FIFA TM 2024-02a - Simulated wear wet (m)	4.0-12.0m	7.90
Directional ball-roll difference – (dry) m	≤3.0m	0.40
Directional ball-roll difference – Simulated wear (dry) m	≤3.0m	0.40
Directional ball-roll difference – Simulated wear (wet) m	≤3.0m	0.80
PC - Peak shock absorption - FIFA TM 2024-03 – dry (%)	60-75%	61.90
PC - Peak shock absorption - FIFA TM 2024-03 - wet (%)	60-75%	61.50
PC - Peak shock absorption - FIFA TM 2024-03 - Simulated wear dry (%)	60-75%	61.50
PC - Peak shock absorption - FIFA TM 2024-03 – 50°C (%)	60-75%	61.40
PC - Peak deformation - FIFA TM 2024-04 – dry (mm)	≤16mm	14.90
PC - Peak deformation - FIFA TM 2024-04 – wet (mm)	≤16mm	14.50
PC - Peak deformation - FIFA TM 2024-04 - Simulated wear dry (mm)	≤16mm	13.30
PC - Peak deformation - FIFA TM 2024-04 – 50°C (mm)	≤16mm	14.20

Name	Comment	Result
PC - Peak deformation - FIFA TM 2024-04 – Frozen at – 5°C (mm)	≤16mm	14.30
PC - Energy returned - FIFA TM 2024-05 – dry (J)	No requirement, intended for technical analysis purposes.	1.500
PC - Energy returned - FIFA TM 2024-05 - wet (J)	No requirement, intended for technical analysis purposes.	1.500
PC - Energy returned - FIFA TM 2024-05 - Simulated wear dry (J)	No requirement, intended for technical analysis purposes.	1.600
PC - Critical Fall Height at HIC 1000 - EN 17435 Method A – dry (m)	>0.60m	0.710
PC - Critical Fall Height at HIC 1000 - EN 17435 Method A – wet (m)	>0.60m	0.720
PC - Critical Fall Height at HIC 1000 - EN 17435 Method A - Simulated wear dry (m)	>0.60m	0.710
PC - Peak torque - FIFA TM 2024-05 – dry (N)	25-50Nm	31.00
PC - Peak torque - FIFA TM 2024-05 - wet (N)	25-50Nm	30.00
PC - Peak torque - FIFA TM 2024-05 - Simulated wear dry (N)	25-50Nm	35.00
PC - Torque at 10° - FIFA TM 2024-05 - dry (N)	No requirement, intended for technical analysis purposes.	19.80
PC - Torque at 10° - FIFA TM 2024-05 - wet (N)	No requirement, intended for technical analysis purposes.	19.80
PC - Torque at 10° - FIFA TM 2024-05 - Simulated wear dry (N)	No requirement, intended for technical analysis purposes.	9.00
PC - Rotational Shear Stiffness - FIFA TM 2024-05 – dry (N/°)	No requirement, intended for technical analysis purposes.	0.70
PC - Rotational Shear Stiffness - FIFA TM 2024-05 – wet (N/°)	No requirement, intended for technical analysis purposes.	0.70
PC - Rotational Shear Stiffness - FIFA TM 2024-05 - Simulated wear dry (N/°)	No requirement, intended for technical analysis purposes.	0.70
PC - Skin/surface friction - FIFA TM 2024-10 - dry	0.35-0.75	0.68
PC - Skin/surface friction - FIFA TM 2024-10 - Simulated wear dry	0.35-0.75	0.67
PC - Heat Determination - FIFA TM 2024-12	Optional and no requirement, intended for technical analysis purposes.	Category 2-3
Turf | Product Report Details		

Name	Comment	Result
Shockpad, E-layer | Type Category		No Shockpad

Photos and graphs

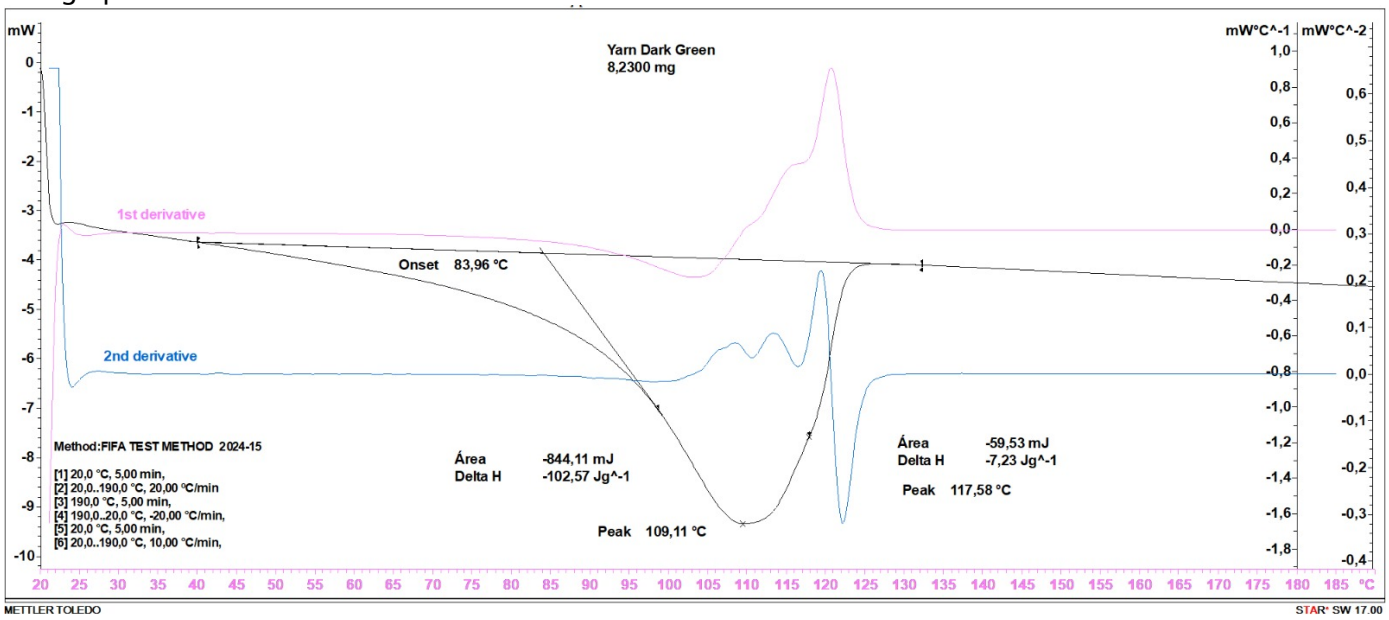
Photo of the sample after preconditioning



Photo of the sample after simulated wear



DSC graph from identification test - fibre 1



DSC graph from UV test - fibre 1

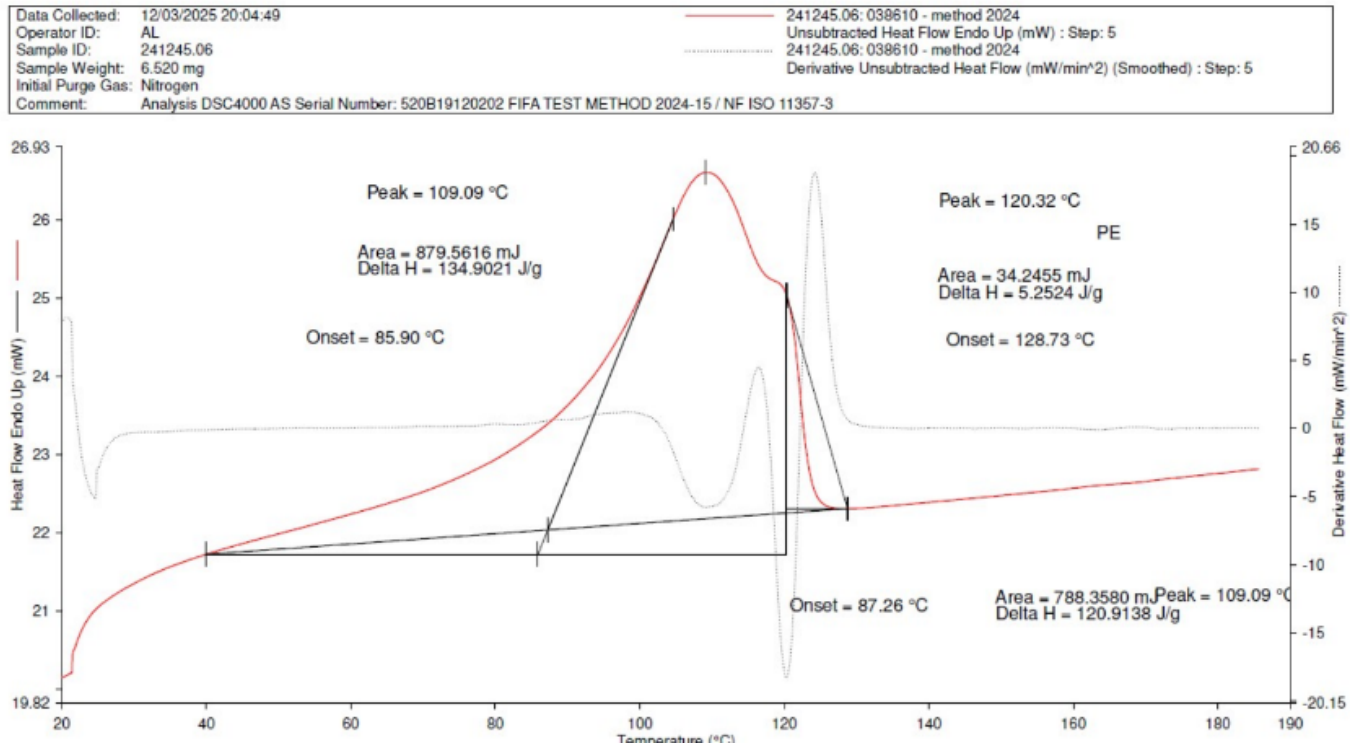
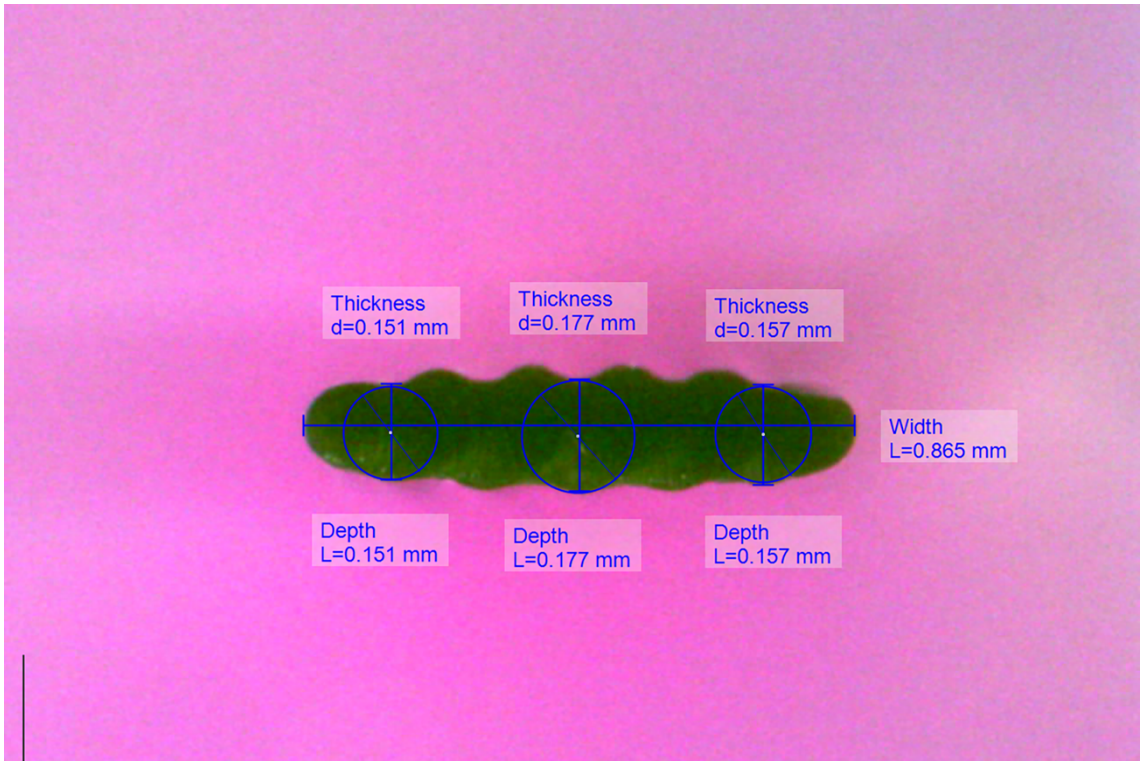
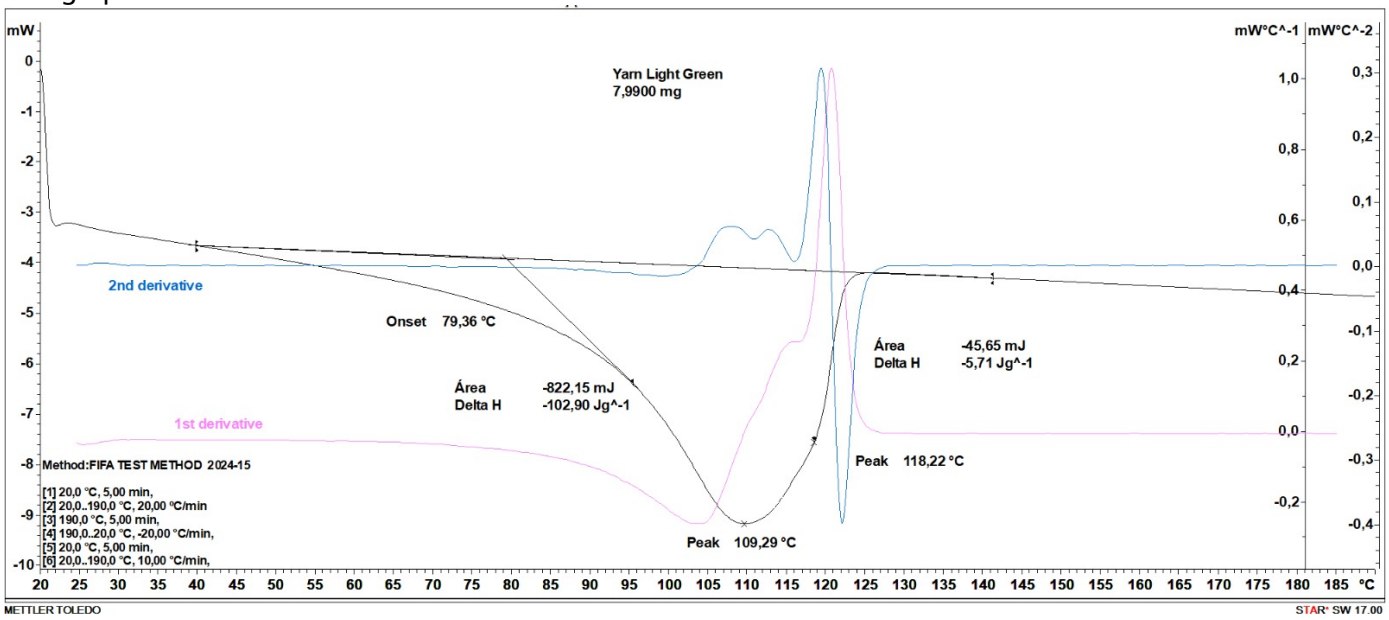


Photo of the fibre 1 cross-section



DSC graph from identification test - fibre 2



DSC graph from UV test - fibre 2

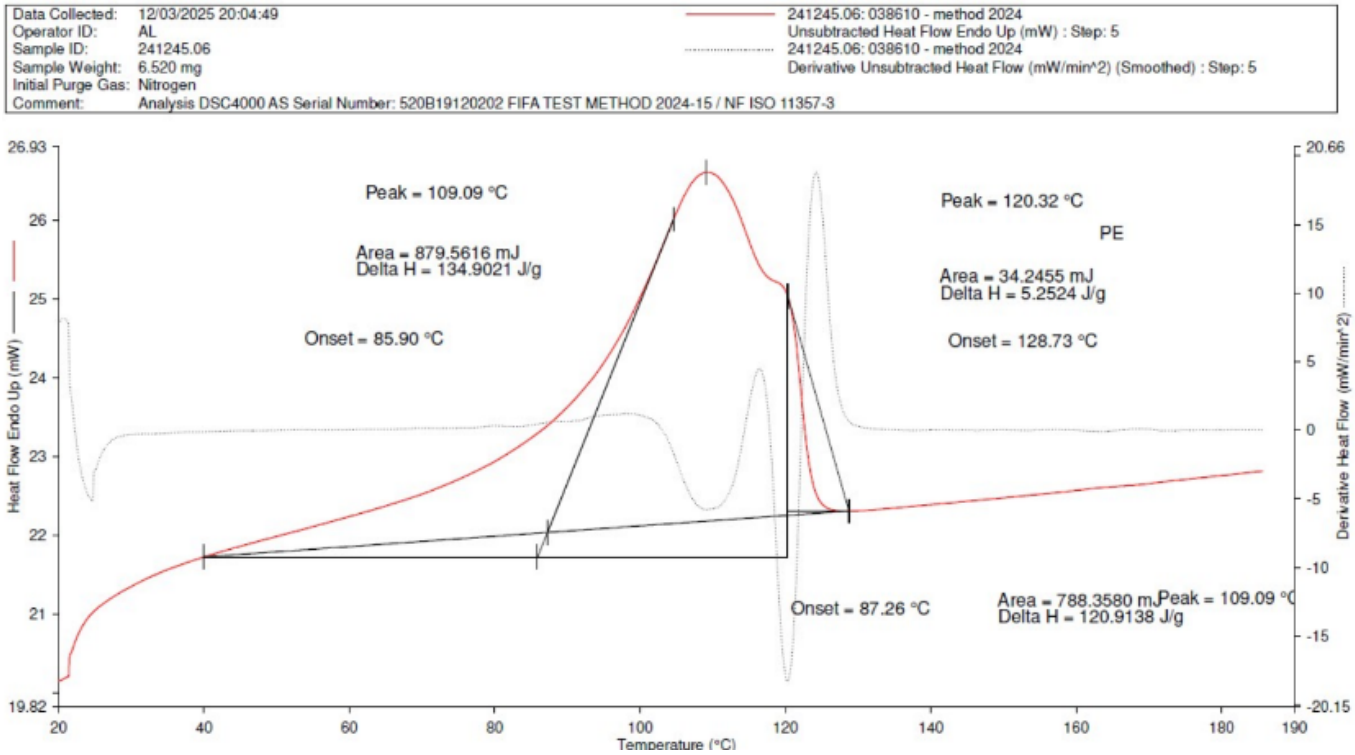
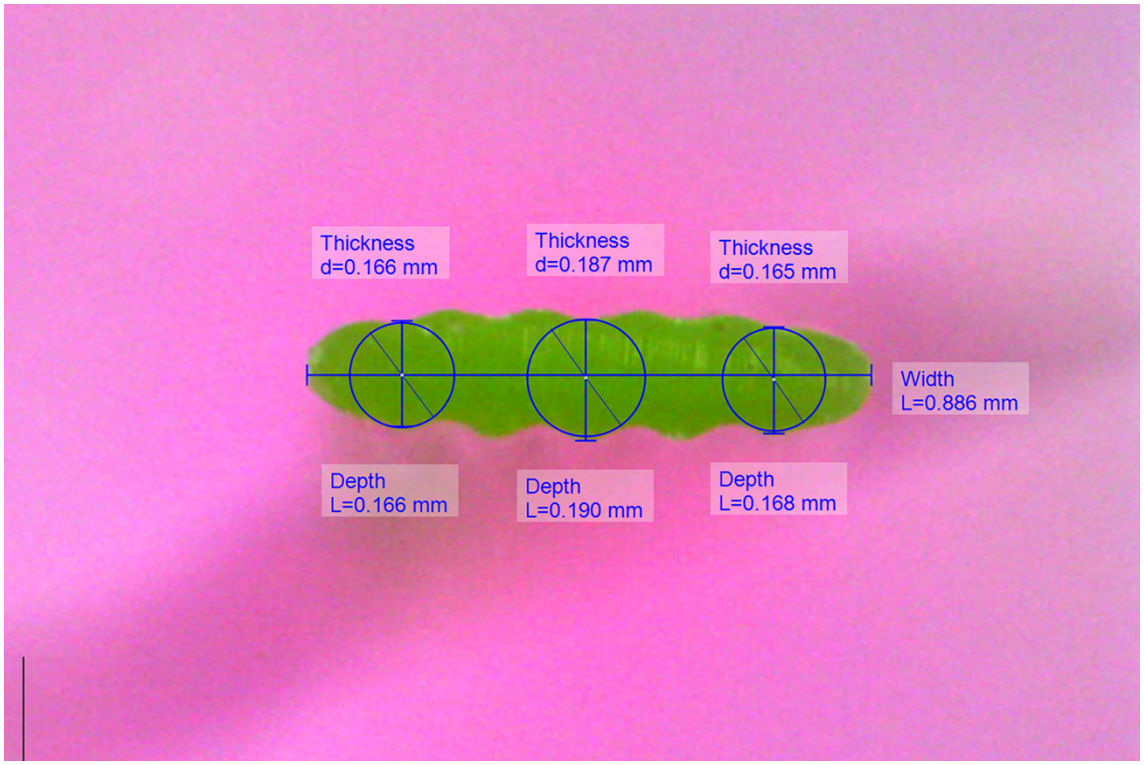
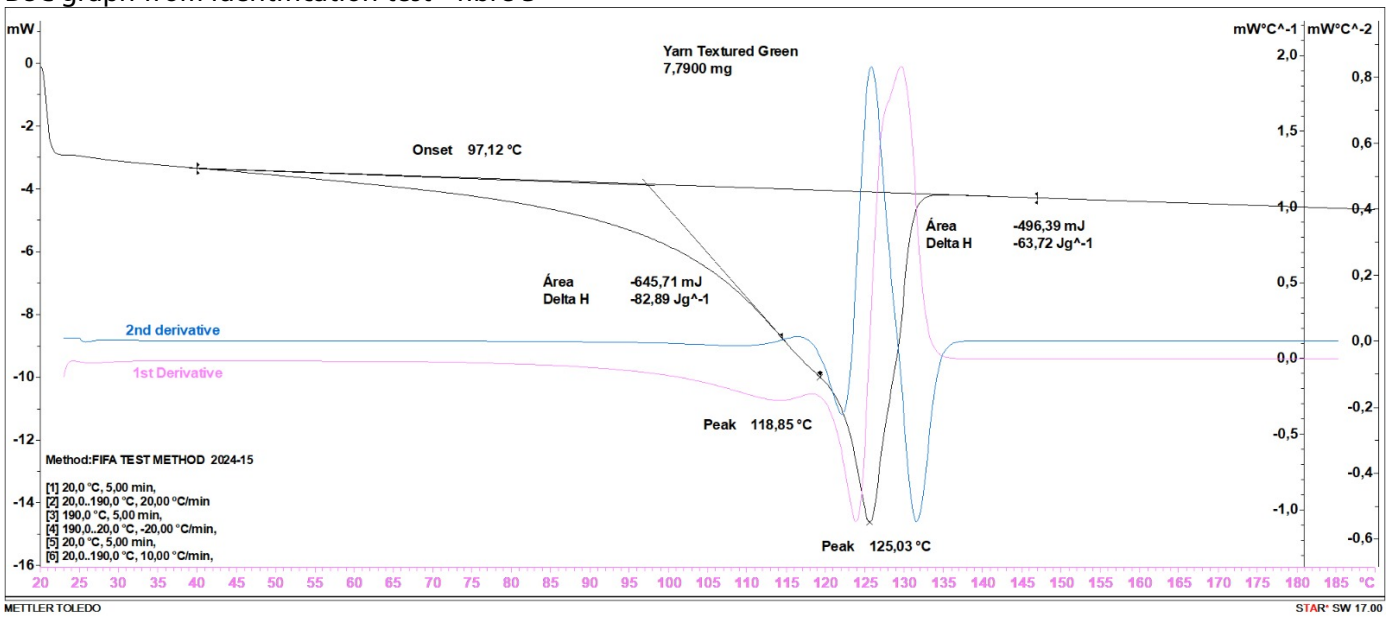


Photo of the fibre 2 cross-section



DSC graph from identification test - fibre 3



DSC graph from UV test - fibre 3

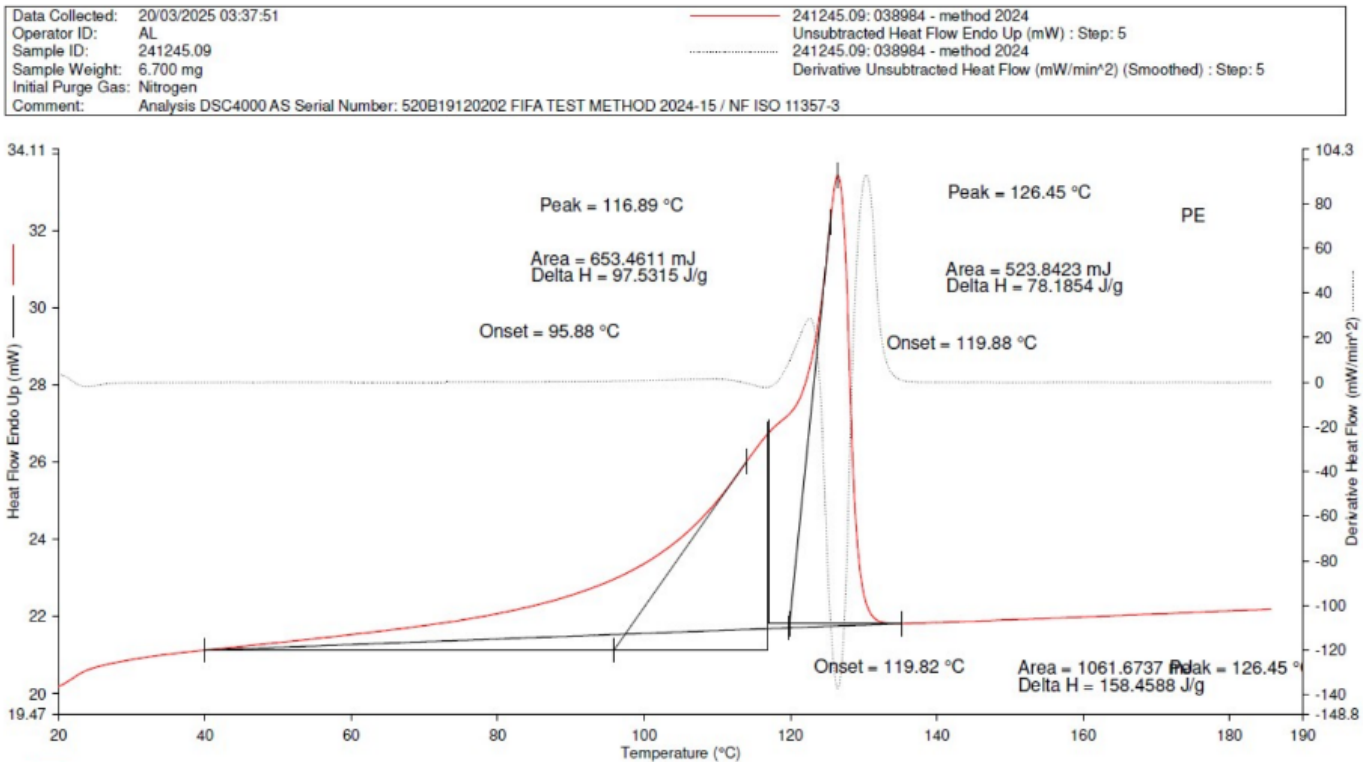
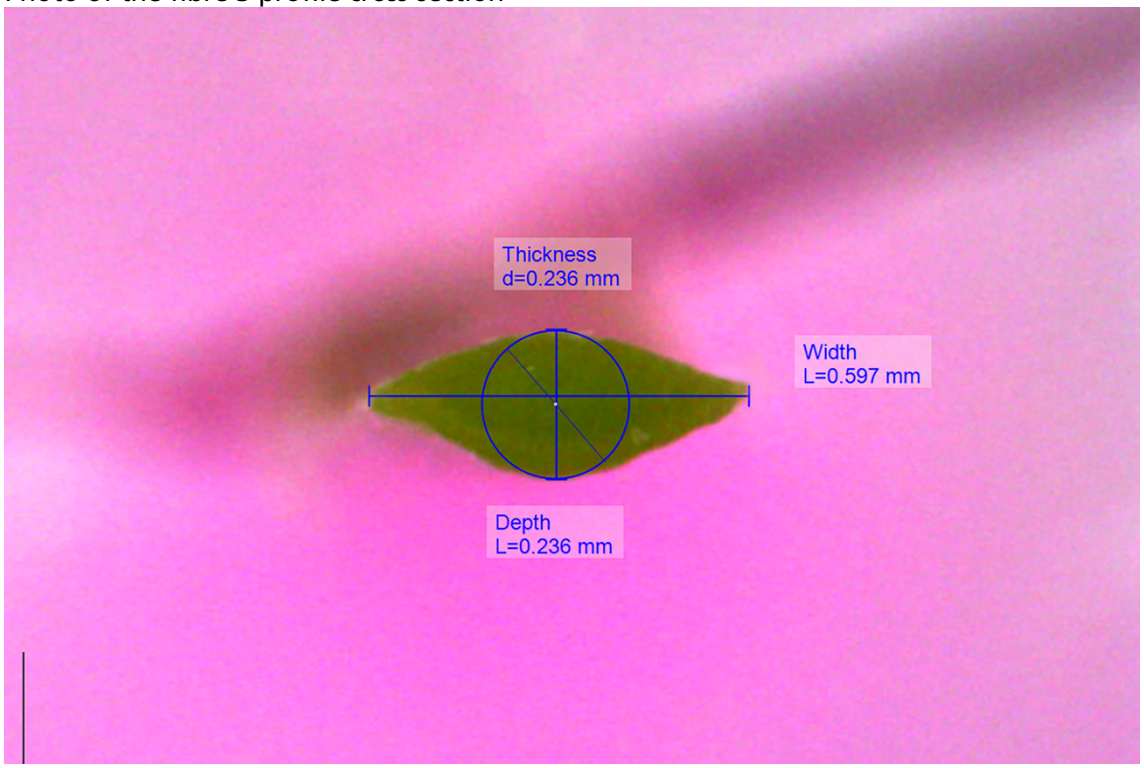
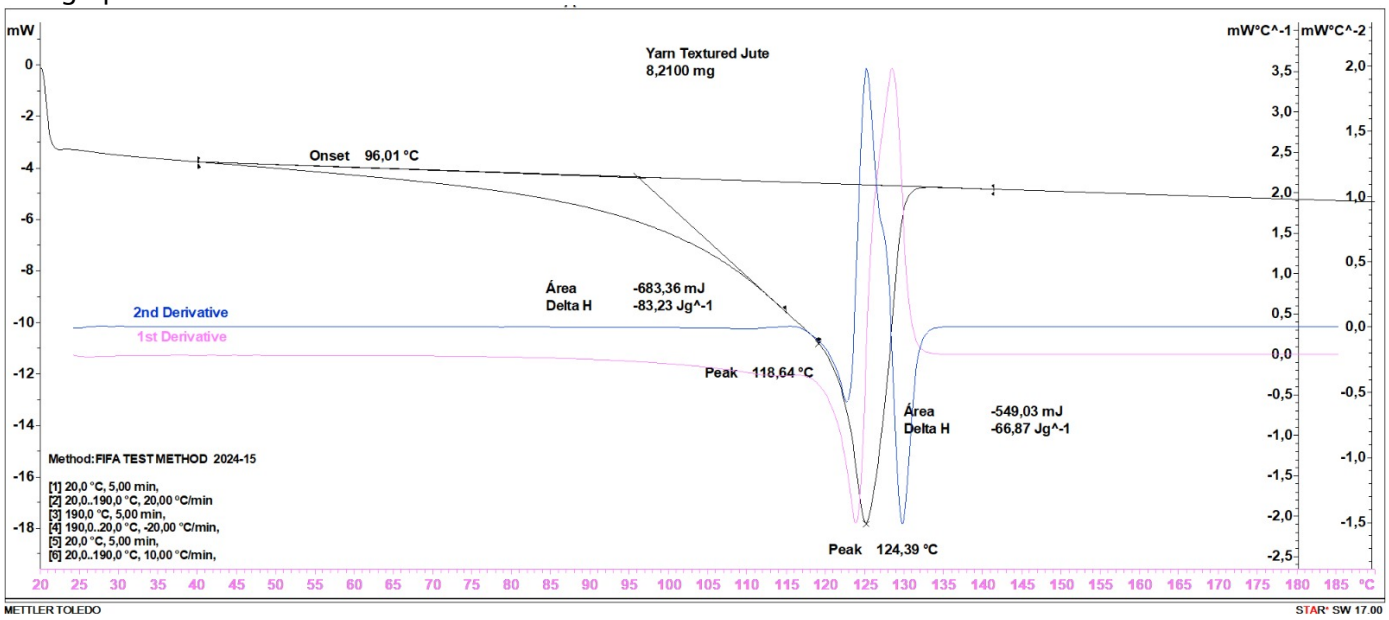


Photo of the fibre 3 profile cross-section



DSC graph from identification test - fibre 4



DSC graph from UV test - fibre 4

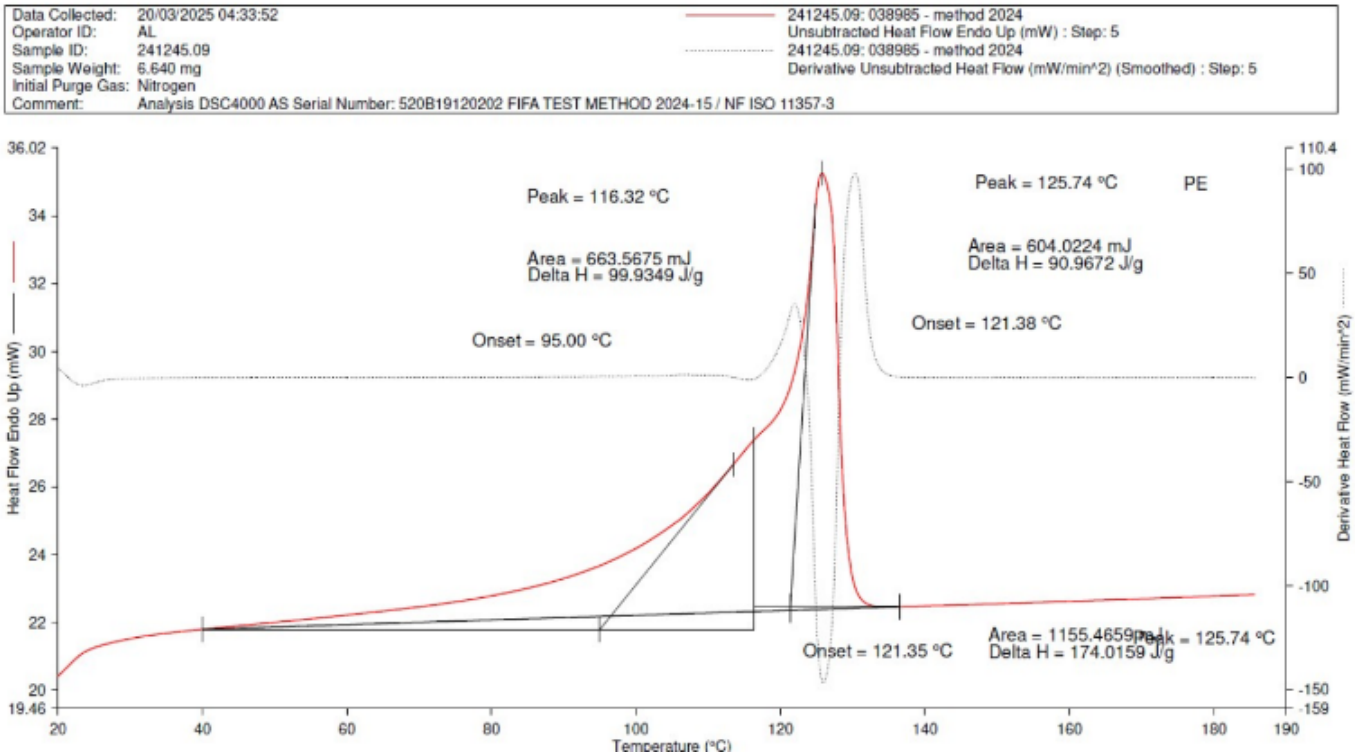


Photo of the fibre 4 cross-section

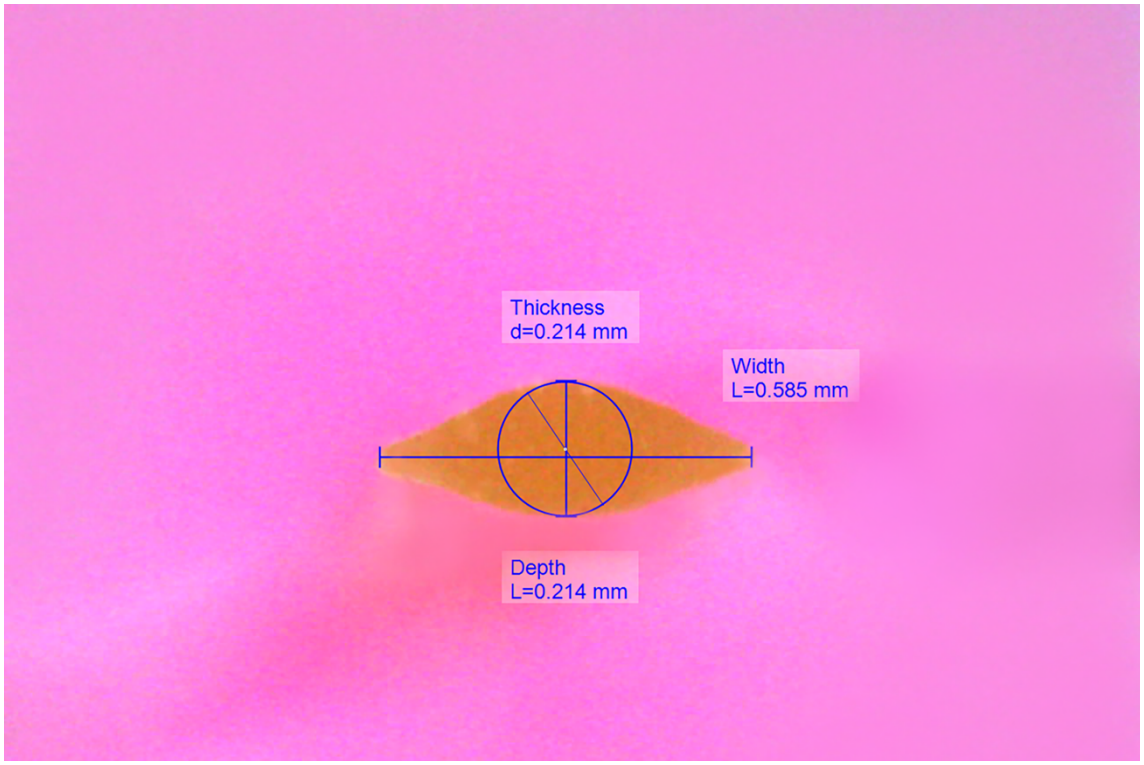


Photo carpet from above



Photo of the backing

