TEST REPORT

Date of releasing test report: 19. 05. 2026

1. TEST SAMPLE

Sample: polymeric raw materials

ID (**Figure 1**): - Pallet material

- Cap material

Date of sample receiving: 15. 05. 2026



Figure 1: Samples received for testing

2. CLIENT

Name: BKP Plastics s.r.o.

Address: Ľ. Podjavorinskej 2575/3B, 915 01 Nové Mesto nad Váhom

3. TESTIS CARRIED OUT BY

Name: Imsys Kft. Material Testing Laboratory

Address: 1. Necső telep, 5100 Jászberény

4. PURPOSE OF THE TEST

The purpose of the test was to investigate the sample provided by the Client with the following methods:

- Determination of melting point and material composition according to MSZ EN ISO 11357-2:2020 standard – accredited examination,

- Determination of melt flow rate according to MSZ EN ISO 1133-1:2022 – accredited examination.

5. TEST CONDITIONS

5.1. DATE OF THE TEST

15. 05. 2026 – 19. 05. 2026

5.2. EQUIPMENTS

Differential scanning calorimeter: Setaram, DSC 131 EVO

Serial number:	LCT24349/01
Date of calibration:	25. 08. 2025

Analytical balance: Radwag, AS 60/220.R2

Serial number:	485400
Date of calibration:	08. 09. 2025

Melt flow rate indexer: Dynisco, LMFI-2LENNCN

Serial number:	206FAF6242
Date of calibration:	28. 01. 2026

5.3. TESTING CONDITIONS

5.3.1. DSC

Specimen:	plastic chips
Number of heating scans:	1
Temperature range:	20-220 °C
Heating rate:	10 °C/min
Atmosphere:	nitrogen
Specimen mass:	6.0 – 7.0 mg
Number of parallel measurements:	2

5.3.2. Melt mass-flow rate

Specimen:	plastic chips
Measurement method:	A (melt mass-flow rate)
Load:	2.16 kg / 5.00 kg
Test temperature:	190 °C / 230 °C
Drying before test:	-
Sample preparation:	magnetic separation
Number of cuts:	3
Number of parallel measurements:	2

6. SUMMARY OF THE TEST RESULTS

6.1. DIFFERENTIAL SCANNING CALORIMETRY ANALYSIS (DSC)

Table 1 lists the melting peak temperatures of the pallet raw material and the estimated percentage composition based on the peak areas. The first sub-peak corresponds to high-density polyethylene (HDPE), while the second sub-peak corresponds to polypropylene (PP). The DSC curves recorded for each sample are shown in **Figure 2.**

Table 1: Melting peak temperatures and composition of the pallet raw material

Number of measurements	Melting peak temperature of sub-peak 1 [°C]	Melting peak temperature of sub-peak 2 [°C]	Ratio of subpeak 1 (HDPE) [%]	Ratio of subpeak 2 (PP) [%]
1	134.7	167.4	84	16
2	133.0	166.0	79	21
Mean ± SD	-	-	**82 ± 3**	**18 ± 3**

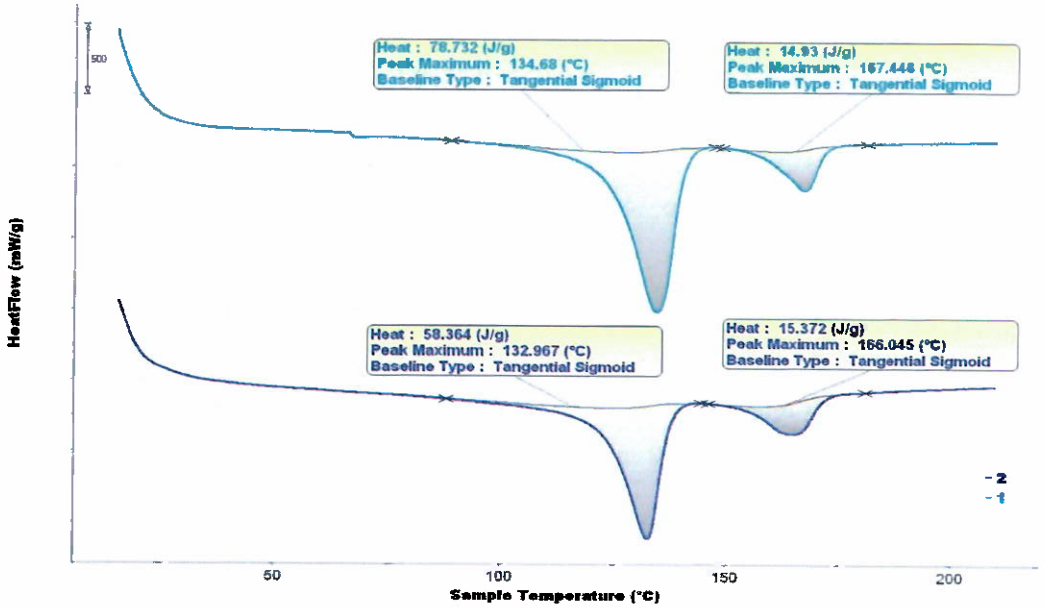


Figure 2: DSC curves of pallet raw material

The cap raw material was composed of plastic fragments of various colors, a portion of which consisted of film. Furthermore, visual inspection revealed metal particles and powder, some of which were magnetic (likely iron), while others were not (presumably aluminum) (**Figure 3**). **Table 2** summarises the melting peak temperatures of the examined plastic fragments. The DSC curves recorded for each sample are illustrated in **Figure 4**.

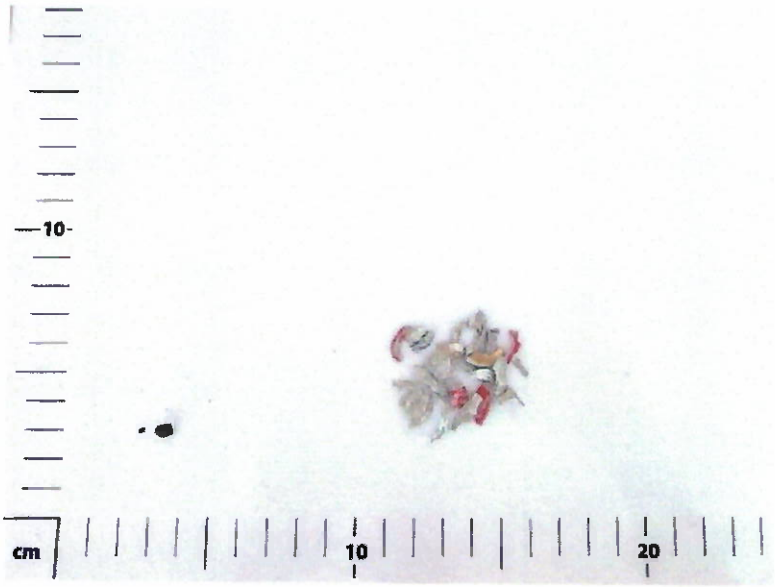


Figure 3: Magnetizable (left) and non-magnetizable metal particles found in the cap raw material (right)

Table 2: Melting peak temperatures and presumed polymer types of the cap raw material

Number of measurements	Melting peak temperature of the components [°C]	Polymer type
1	132.3	HDPE
2	154.0	PP

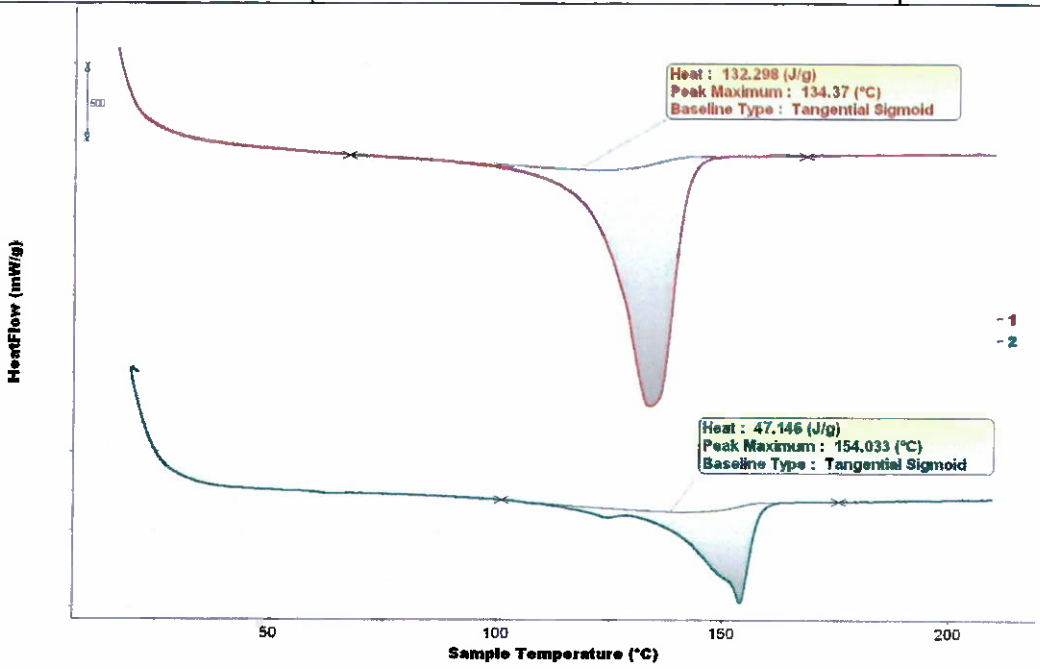


Figure 4: DSC curves of the cap raw material

6.2. MELT MASS-FLOW RATE (MFR)

The melt mass-flow rate results measured at different parameters are summarised in **Table 2.**

Table 2: Melt mass-flow rate results

Sample ID	MFR (2.16 kg/190 °C) [g/10 min]	MFR (5.00 kg/190 °C) [g/10 min]	MFR (2.16 kg/230 °C) [g/10 min]
Pallet raw material	1.62 ± 0.20	7.93 ± 0.22	-
Cap raw material	1.32 ± 0.16	-	2.99 ± 0.23

The test results presented in this report relate only to the sample/specimen tested. This report shall not be reproduced, except in full, without the written approval of the Material Testing Laboratory of IMSYS Ltd.

The test was accomplished by:

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Dr. Ferenc Ronkay, PhD.
Head of laboratory

Verified by:

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Emese Győry-Slezák
Testing engineer