



COMPATIBILIZERS FOR SCRAP REPORT

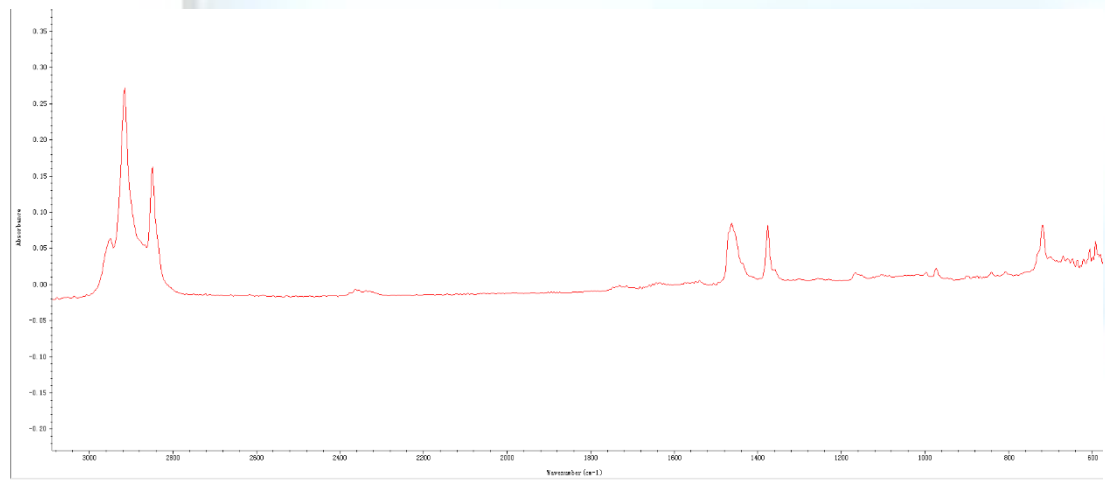
This report determined how successful polyolefin scrap with compatibilizers **GRAFTABOND™ PP-MAH 10025 CA** and **GRAFTABOND™ EP-MAH 00405 IM**.

MATERIALS USED

Matrix materials:

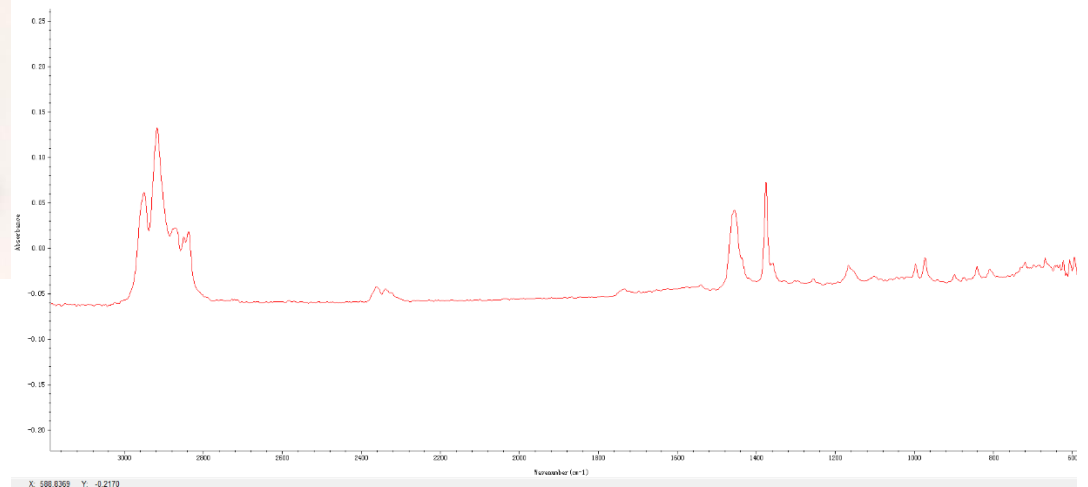
Scrap 1: Mix 50:50 (PP:PE)

MFI (230°C 2,16kg) = 6,15 g/10 min



Scrap 2: Mix 70:30 (PP: other)

MFI (230°C 2,16kg) = 15,9 g/10 min



Material Report

TESTS PERFORMED

- Checked the composition of the scrap with FTIR-ATR spectroscopy,
- Extruded with 2% GRAFTABOND™ PP-MAH 100025 CA and 3% GRAFTABOND™ EP-MAH 00405 IM.
- Extruded with 2% GRAFTABOND™ PP-MAH 100025 CA and 5% GRAFTABOND™ EP-MAH 00405 IM.
- Specimen for mechanical tests were then injection molded.

Properties tested:

- Melt flow index, in accordance with ISO 1133.
- Tensile properties, in accordance with ISO 527 (Specimen size A1, 50 mm/min).
- Charpy impact strength, in accordance with ISO 179 (Specimen 1eA, 4J hammer).

RESULTS

Scrap 1

Property	Units	No compatibilizer	2% PP-MAH 100025 CA & 3% EP-MAH 00405 IM	2% PP-MAH 100025 CA & 5% EP-MAH 00405 IM
Max. Tensile Stress	MPa	20,3 ±0,3	19,2 ±0,6	18 ±0,4
Elongation at Break	%	11,2 ±0,9	18,7 ±2,4	24,0 ±2,0
Charpy Impact Strength	kJ/m ²	4,1 ±0,8	8,3 ±1,2	11,1 ±1,0

Scrap 2

Property	Units	No compatibilizer	2% PP-MAH 100025 CA & 3% EP-MAH 00405 IM	2% PP-MAH 100025 CA & 5% EP-MAH 00405 IM
Max. Tensile Stress	MPa	25,3 ±0,3	24,3 ±0,6	23,2 ±0,4
Elongation at Break	%	12,1 ±0,9	14,2 ±2,4	18,4 ±0,5
Charpy Impact Strength	kJ/m ²	5,1 ±0,8	6,2 ±1,0	7,9 ±1,0

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