

Extended Material Data: Daploy™ WB130HMS and WB260HMS

Table 1: Comparison WB130HMS vs. WB260HMS

	WB130HMS	WB260HMS	Unit	Method
MFR	2,1	2,4	g/10min	ISO 1133
Melt Strength 200°C	31	26	cN	BTM
Melt Extensibility 200°C	210	200	mm/s	BTM
DSC Melting Temperature	162	145	°C	BTM
DSC Crystallization Temperature	128	111	°C	BTM
FLEXURAL MODULUS	1900	1000	MPa	ISO 178
IMPACT STRENGTH notched +23°C	3	8	kJ/m ²	ISO 179 1eA
IMPACT STRENGTH notched -20°C	1	1	kJ/m ²	ISO 179 1eA
TENSILE MODULUS	2000	1000	MPa	ISO 527
TENSILE STRENGTH	40	30	MPa	ISO 527
TENSILE STRAIN AT BREAK	12	500	%	ISO 527
HDT TEMPERATURE A (1.8 Mpa)	60	50	°C	ISO 75-2
HDT TEMPERATURE B (0.45MPa)	110	72	°C	ISO 75-2

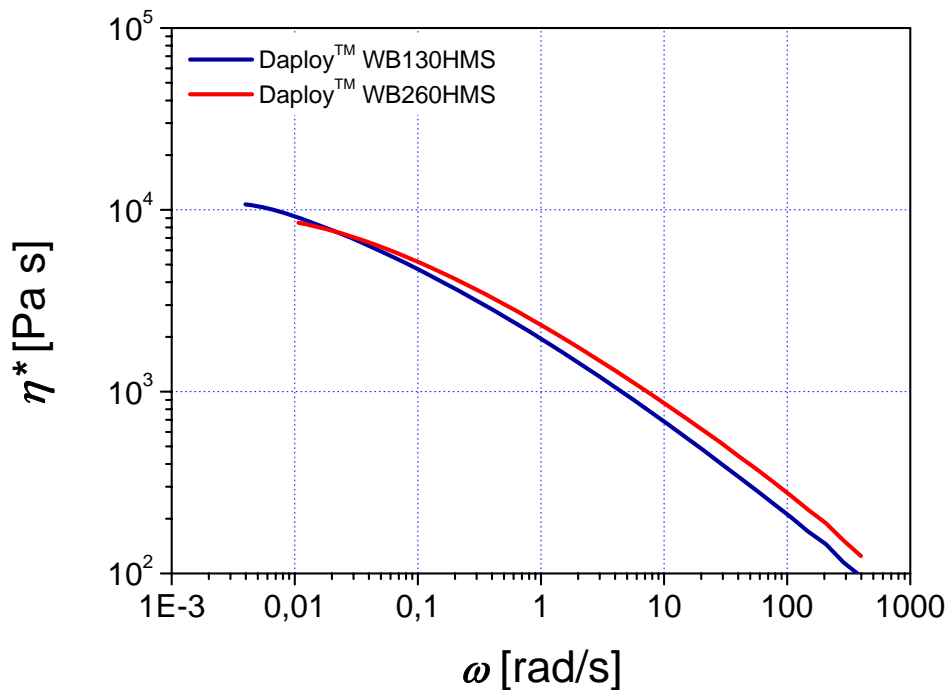


Figure 1: Rheology comparison WB130HMS vs. WB260HMS

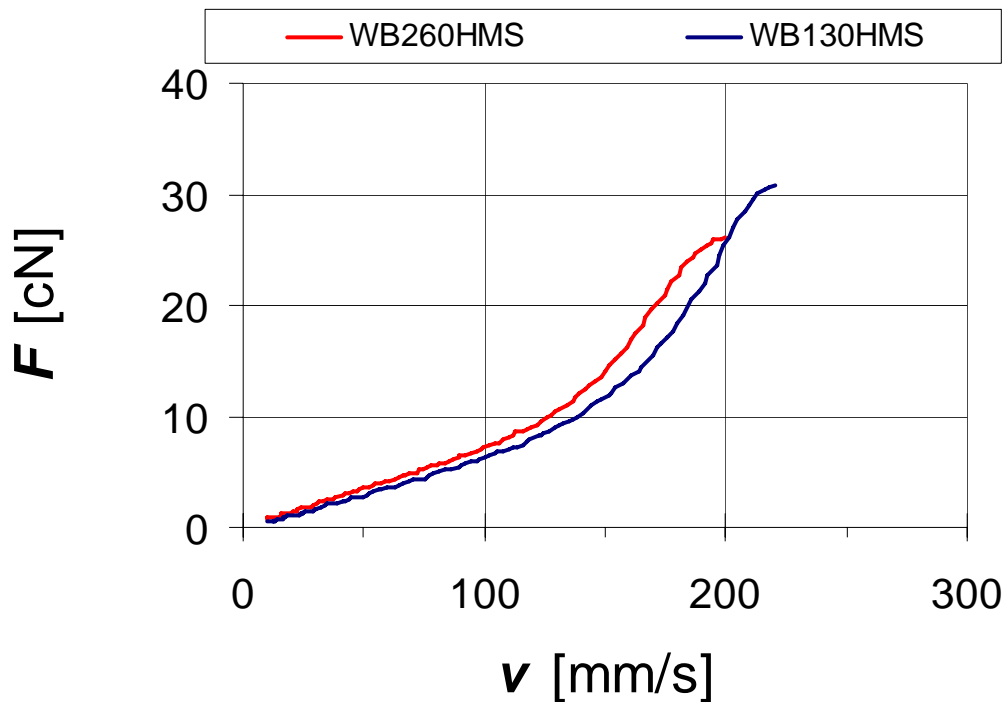


Figure 2: Rheotens comparison WB130HMS vs. WB260HMS

Table 2: Process Settings (foaming with CO₂, 60mm single screw extruder)

	WB130HMS		WB260HMS		Unit
	from	to	from	to	
Mass flow	15	30	15	30	kg/hr
CO ₂	0,4	1,2	0,4	1,2	%
Nucleating Agent*	0,15	0,30	0,15	0,30	%
Temperatures Zone 1	160	170	150	160	°C
Zone 2	180	190	170	180	°C
Zone 3	220	220	210	220	°C
Zone 4	220	240	230	240	°C
Zone 5	220	240	215	225	°C
Zone 6	220	240	165	175	°C
Zone 7	180	180	155	165	°C
Cooling Extension	175	180	145	155	°C
Mixer	175	175	140	145	°C
Adapter	175	180	140	145	°C
Die	165	170	140	145	°C
Melt Temperature	165	170	140	150	°C
Extruder (Injection) Pressure	50	80	70	90	bar
Mixer Pressure	40	65	50	70	bar
Die Pressure	30	50	25	40	bar
Screw Speed	15	25	15	25	rpm
Take off speed	2,5	4	2,5	4	m/min
Foam Density	120	400	180	400	kg/m ³

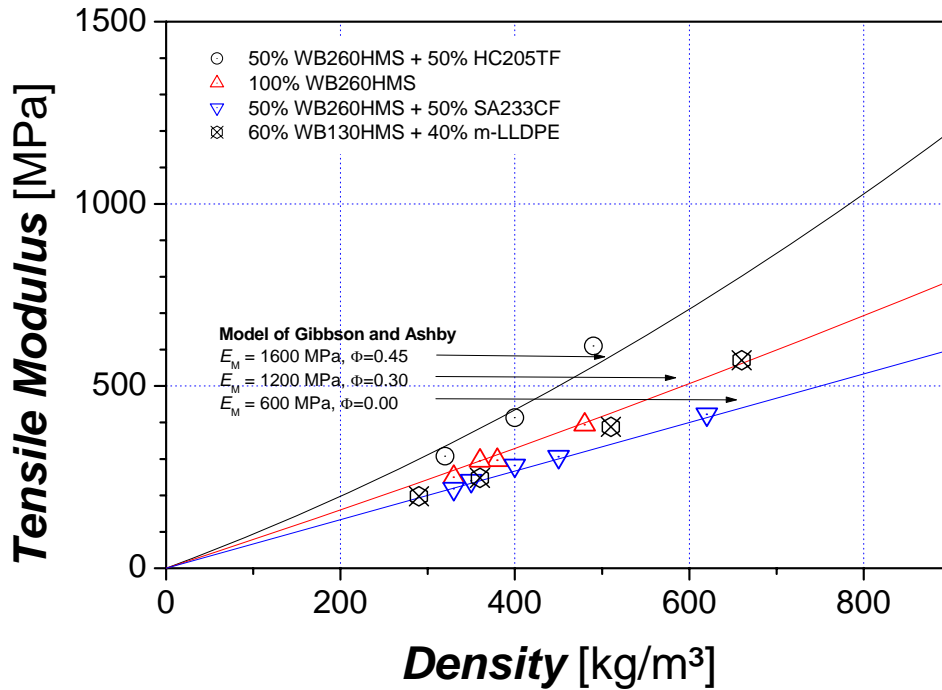


Figure 3: Mechanical properties of foamed WB260HMS-blends

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