



PE-g-MAH

Maleic-Anhydride-Grafted Polyethylene Coupling Agent

PRELIMINARY ENGINEERING DATA

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OWNER TECHNICAL & R&D
STATUS CONTROLLED DEVELOPMENT DATA

PRODUCT OVERVIEW

A reactive PE compatibiliser/coupling platform for mineral-filled HFFR, recycled blends, wood-plastic composites and polar/non-polar interfaces. Applications: HFFR compounds; Wood-plastic composites; Recycled PE blends and filled PE. Key features: Reactive compatibilisation; Mineral/fibre coupling target; Low-flow HFFR-compatible variant.

PRELIMINARY TECHNICAL PROPERTIES

PROPERTY / CONDITION	TEST METHOD	PROVISIONAL VALUE	UNIT
Melt flow rate, 190°C/2.16 kg	ISO 1133-1	2.0 ± 1.0	g/10 min
Density, 23°C	ISO 1183-1	0.91-0.93	g/cm³
Melting peak	ISO 11357-3	120 ± 5	°C
Vicat softening temperature, A50	ISO 306	85-105	°C
Total acid functionality / calibrated graft level	Extraction + titration and calibrated FTIR	To be established	mg KOH/g or wt. %
Free MAH / extractables / volatile content	Validated extraction + GC/HPLC	To be established	wt. %
Gel fraction	Validated solvent extraction	To be established	wt. %
Performance in defined HFFR or WPC reference	Controlled compounding + named tests	Minimum gain to be established	
Recommended addition	Compound DOE	1-10	%

QUALIFICATION & USE

- Values are development targets, not a sales specification or certificate of analysis.
- Final limits require independent production-lot validation using the cited methods and controlled specimen preparation.
- Regulatory, food-contact, medical, UL, IEC, ATEX or OEM compliance applies only when confirmed in a grade-specific document.