ULTRA-BLEND™

Homogenising agents facilitate the blending of polymers. They increase the compatibility of the polymers to each other and make reaching optimum blending much easier. By that, they increase the mixing efficiency, lower the energy consumption, lower reject and scrap rates, enhance storage stability and improve the dimension stability of uncured rubber compounds and finished articles.

ULTRA-BLEND™ tackifiers increase the long term tackiness of rubber compounds, minimise delamination, reduce trapped air and thus reduce reject rates of the finished goods.

Product	Appearance / Form	Chemical Composition	Softening Point (°C)	Applications
ULTRA-BLEND™ 2000	Brown pastilles	Alkyl phenol formaldehyde resins.	128	It improves the building tack of synthetic rubber compounds. It displays outstanding short- and long-term tackifying effects.
ULTRA-BLEND™ 3000	Clear yellow liquid	Xylene resins.	N/A	ULTRA-BLEND™ 3000 improves the building tack of synthetic rubber compounds. It improves dispersion of fillers and softens the compound. The reduction of viscosity assists down line processing, in particular milling and calendering.
ULTRA-BLEND™ 4000	Black pastilles	Mixture of dark aromatic hydrocarbon resins.	105	It improves the homogeneity of polymer blends of different polarities or different viscosities.
ULTRA-BLEND™ 5000	Brown pastilles	Mixture of medium coloured, aromatic hydrocarbon resins.	98	It behaves similar to ULTRA BLEND™ 4000 with very minimum discolouration.
ULTRA-BLEND™ 6000	Yellow pastilles	Mixture of light coloured, aliphatic hydrocarbon resins.	100	A non-discolouring homogeniser that improves the homogeneity of polymer blends of different polarities or different viscosities.

ULTRA-BLEND™ √ = As Used √√ = Best Suited	ULTRA-BLEND™ 2000	ULTRA-BLEND™ 3000	ULTRA-BLEND™ 4000	ULTRA-BLEND™ 5000	ULTRA-BLEND™ 6000
Chemical Composition	**Alkyl phenol formaldehyde resins**	**Xylene resins**	**Mixture of dark aromatic hydrocarbon resins**	**Mixture of medium coloured, aromatic hydrocarbon resins**	**Mixture of light coloured, aliphatic hydrocarbon resins**
Functions					
Homogenising	–	–	√	√	√
Tackifying	√	√	–	–	–
Dispersing	–	–	√	√	√
Process enhancement					
Mixing (faster incorporation)	–	√	√	√	√
Extrusion	–	–	√	√	√
Calendering	–	–	√	√	√
Appearance	Brown pastilles	Clear yellow liquid	Black pastilles	Brown pastilles	Yellow pastilles
Softening point, (°C)	128	N/A	105	98	100
Dosage (phr)	3 ~ 5	3 ~ 20	3 ~ 15	2 ~ 5	2 ~ 5
Sequence of addition					
Beginning of mix cycle with polymer(s)	√	–	√	√	√
With filler(s) and/or small ingredients	–	√	–	–	–
As used for:					
NR	√	√	√	√	√
SBR	√	√	√	√	√
BR	√	√	√	√	√
NBR	√	√√	√	√	√
CR	–	√√	√	√	√
EPDM	√	–	√	√	√
IIR	√	–	√	√	√
ACM	√	√√	–	–	–