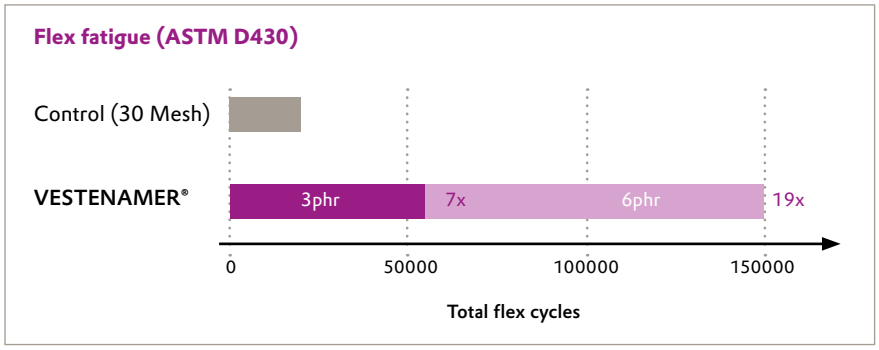
VESTENAMER® for Rubber Recycling

The best additive to push boundaries with ground tire rubber

Combine highest lifetime durability with the finest surface finish

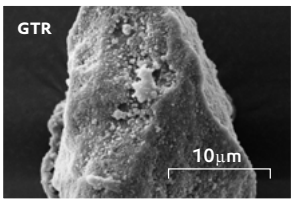
VESTENAMER® trans-polyoctenamer (TOR) meets the demands of high-quality products with recycled rubber. This unique polymer gives recycled rubber products high flexibility and impressive mechanical properties. It is curable like real rubber unlike other processing-aids. This makes VESTENAMER® a perfect fit for recycled rubber products to achieve highest lifetime durability.

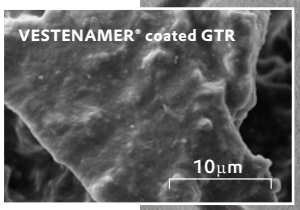
The graph shows significant improvement in flexibility and contributes to a longer lifetime. VESTENAMER® addition improves total flex cycles from 7 to 19 times when dosage is increased from 3 to 6phr.



Achieve a smoother surface!

Scanning electron microscopy (SEM) shows a smooth surface when ground tire rubber has been coated with VESTENAMER®





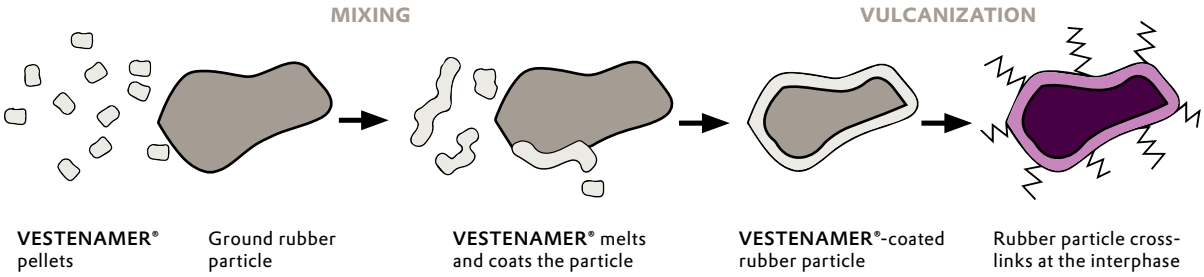
EVONIK Leading Beyond Chemistry

Improve processing of recycled rubbers, enhance mechanical properties, and reduce scrap rate

One single additive overcomes processing limits of recycled materials by improving compound mixing and mechanical properties of molded or extruded rubber parts. VESTENAMER® as a surface modifier, ensures efficient dosage and therefore economic production with ground tire rubbers (GTR) – either as a base polymer or in blends with virgin rubber.

VESTENAMER® adds value to ground rubber particles by coating their surface for improved processing and performance.

So start saving today by reusing recycled rubber and contribute to sustainability!



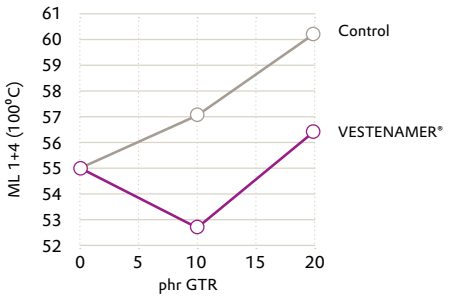
Virgin rubber blends

Formulation (phr)	Control	VESTENAMER®
SBR	137.5	137.5
GTR (200 MESH)	0/10/20	10/20
VESTENAMER®		0.45/0.9
Carbon Black	80	80
Process oil	10	10
Curatives & Others	12.1	12.1

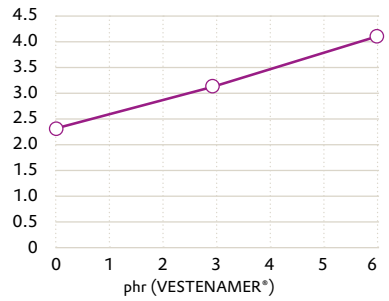
Molded goods from GTR

Formulation (phr)	Control	VESTENAMER®	
GTR (30 Mesh)	100	100	100
VESTENAMER®		3	6
Oil (paraffinic)	12	12	12
Curatives & Others	3.8	3.8	7.6

Mooney viscosity (ML 1+4, 100°C)



Tensile Strength (MPa)



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