Creating Material Change



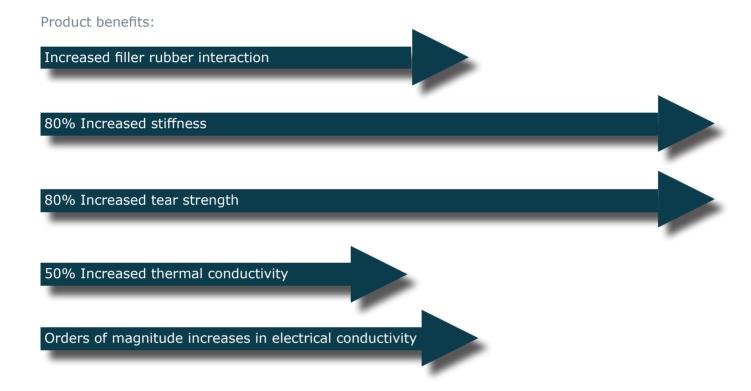
Nanomaterial Enhanced Process Oils



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Haydale has developed a range of plasma functionalised nanomaterial additives for use in elastomer product manufacturing. These functionalised nanomaterials are available as highly loaded dispersions in process oils and deliver enhanced mechanical, physical, electrical and thermal properties of elastomer compounds.

Nanomaterials are unique in that they can be incorporated into elastomers at significantly lower loadings than traditional fillers to yield material and product performance improvements.



Functionalised nanomaterials that have been pre-dispersed in process oils is an effective mechanism to deliver nanomaterials into elastomer compounds, with the advantage that the nanomaterials are deagglomerated and maintain a stable dispersion in the process oils, enabled through plasma functionalisation, prior to elastomer compounding.

Product features:

- Nanomaterials can be supplied in a range of process oils, selected for specific elastomers including, but not limited to, NR, EPDM, HNBR, VMO
- Loading levels of pre-dispersed plasma functionalised nanomaterials in process oils range from 25% to 60%
- Haydale's patented plasma functionalisation process delivers improved interaction with the elastomer due to the additions of chemical species on the surface of the nanomaterials
- Products are available in trial quantities of 500g, 1kg and 10kg, with industrial quantities available on request

The content supplied in this product information sheet ("Information") supersedes all previous versions supplied. Version 3, August 2019

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