

# EPOLENE® polymers provide a smart choice for enhancing mold flow performance while maintain physical property targets in EPDM compounds versus increasing oil loading

In EPDM compounding applications, oils are frequently used as a processing aid to improve mixing and processability. Independent laboratory studies have recently shown that the addition of EPOLENE® low molecular weight polymers can enhance mold fill performance and processability without loss of physical properties. The data generated by these studies show that just a 5 phr of EPOLENE® N-14 added to the compounding:

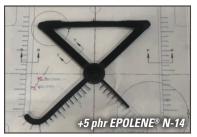
- Enhanced mold fill performance over control, comparable to increased oil loading of 10 phr
- ▶ Bolstered overall physical properties of the molded article vs. increasing oil levels
- ▶ Improved scorch time of the compounds vs control

# **EPOLENE® N-14 performance vs increased oil in EPDM Rubber**

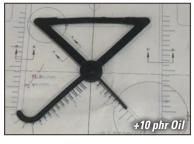
### **Mold Fill Performance**



Control formulation contains 25 phr oil and exhibits poor mold fill performance

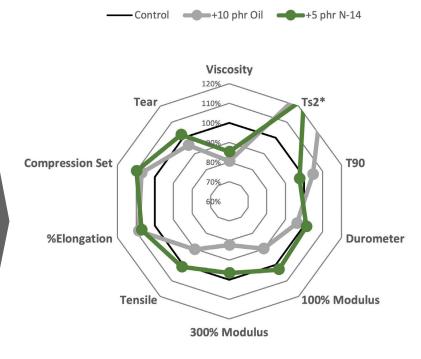


Addition of +5 phr N-14 provides significant benefit in mold fill performance while maintaining physicals



Addition of +10 phr oil improves mold fill performance as well, but at a cost to physical properties

# **Compound Properties**



Notes: Control EPDM formulation contains 25 phr oil as a baseline. Subsequent tests shown include further additions of 5 phr N-14 and 10 phr oil (for a total of 35 phr oil) to the control. "phr" stands for parts per hundred rubber.

\*Ts2 values exceeded 120% of control. +10 phr oil provided 143% improvement and +5 phr N-14 generated 125% improvement.

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Contact us today to learn more about our products and capabilities, or schedule a visit to our Customer Solutions Center.

## **Westlake Polymers LLC**

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