



Struktol Company of America
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A decorative graphic consisting of a vertical black line and a horizontal black line intersecting at a point. To the left of the intersection, there are overlapping colored squares in blue, yellow, and red, with a soft gradient effect.

An Overview of Struktol Usage

Tire / Retread Applications

STP0207 (revised 10/2003 PAD)

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Processing Additives

- Internal lubricants
 - ✓ Reduce apparent viscosity
 - ✓ Prevent excessive filler agglomeration

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Internal Lubricants

Key applications

- ✓Truck tread - lower phr active fillers/low oil
- ✓Passenger tread - highly filled 1 stage mixing
- ✓Very hard apex/chafer
- ✓SSBR/BR - Improve silica dispersion in tread

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Internal Lubricants

Recommended Struktol products

- ✓Struktol A 50
- ✓Struktol EF 44A
- ✓Struktol HPS 11
- ✓Struktol WB 222
- ✓Struktol ZB 47

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Processing Resins

- Homogenizing resins
 - ✓ Blending polymers (polarity/viscosity)
 - ✓ Better incorporation of fillers
 - ✓ Better uniformity

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Homogenizing Resins

- Key applications
 - ✓ OTR tread NR/BR - better filler blend/dispersion
 - ✓ Innerliners (100% Halobutyl) - improves cured adhesion to carcass
 - ✓ SSBR/BR blends - improved dispersion and uniformity
 - ✓ Butyl/Exxpro control of nerve

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Homogenizing Resins

- Recommended Struktol products
 - ✓ Struktol 40 MS
 - ✓ Struktol 60 NS

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Internal Lubes/Homogenizing Agents

- Lubricant/homogenizing
 - ✓ Reduce viscosity
 - ✓ Better filler incorporation
 - ✓ Prevent filler agglomeration
 - ✓ Blending polymers (polarity/viscosity)
 - ✓ Improves extrusion

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Lubricant/Homogenizing

- Key applications
 - ✓ OTR tread NR/BR - better filler dispersion
 - ✓ SSBR/BR blends - better dispersion and uniformity of silica tread
 - ✓ Truck tread - lower heat build-up and better extrusion

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Internal Lubes/Homogenizing

- Recommended Struktol product
 - ✓ **Struktol HP 55**

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Lubricants/Release Products

- Lubricants/release agents
 - ✓ Viscosity reduction
 - ✓ Improved flow and mold release
 - ✓ Reduced mold fouling
 - ✓ Improved extrusion rates

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Lubricants/Release agents

- Key applications
 - ✓ Side Walls/Treads - To improve aesthetic appearance
 - ✓ To improve flow of curing envelope
 - ✓ Tires/retreads - improve mold release and reduce "Sipe" tearing

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Lubricants/Release agents

- Struktol recommended products
 - ✓ Struktol HPS 11
 - ✓ Struktol WB 16

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Active Chemicals

- Cure activators
 - ✓ Enhanced stearic acid/zinc oxide activation
 - ✓ Increased reversion resistance
 - ✓ Improved dynamic properties
 - ✓ Viscosity reduction

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Cure activators

- Key applications
 - ✓ Control overcure in large cross sections
 - ✓ Allow increased cure temperatures
 - ✓ Increased dynamic “blow out” time (low HBU)
 - ✓ Improves soluble EV cure systems
 - ✓ Improved flow properties

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Cure activators

- Recommended Struktol products
 - ✓ **Struktol Activator 73 A**
 - ✓ **Struktol ZB 47**
 - ✓ **Struktol ZEH-DL**

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Other Related Products

- Chemical Peptizers
 - ✓ Improve breakdown, mixing and uniformity
 - ✓ **Struktol A 82, A 86, A 95**
- Tackifiers
 - ✓ Improves green tack and long term tack
 - ✓ **Strukrez 220 and TH 64**

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