

INDOPOL[®] POLYBUTENES | LUBRICANTS

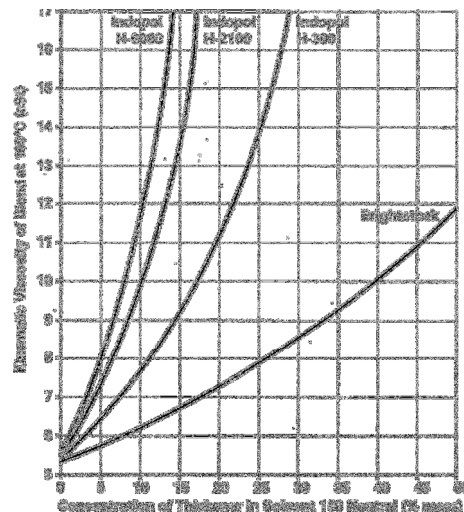


Since 1946

Indopol polybutenes are clear, pure, synthetic hydrocarbon polymers that contain no additives or aromatic compounds. Polybutenes are widely used in many automotive and industrial oil applications, replacing bright stocks and mineral oils. The performance improvements achieved with Indopol polybutenes can be attributed to their unique physical properties and wide viscosity ranges.

BENEFITS

- Excellent thickeners and shear stable polymers.
- Good lubricity, high film strength and viscosity indices.
- Low pour points, volatility and toxicity.
- Good tack and anti-throw properties.
- Hydrophobic, non-corrosive, non-drying, non-staining.
- Burns cleanly and efficiently at elevated temperatures
- Wide molecular weight and viscosity range.

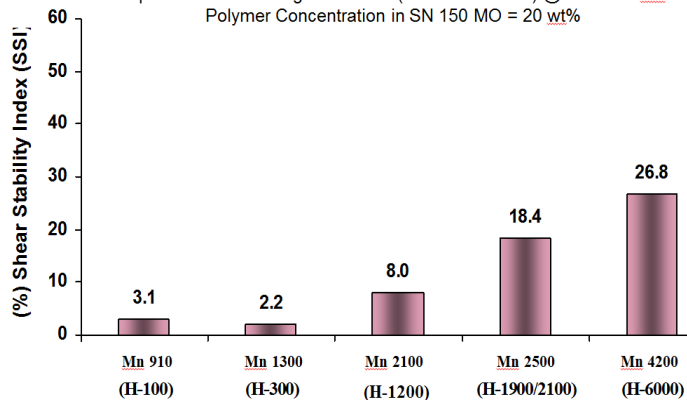


ADVANTAGES - as replacements for bright stocks, mineral oils and other thickeners

- Better thickening efficiency and viscosity indices (VI).
- Lower smoke, exhaust blocking and deposits.
- Better low temperature properties and volatility.
- Improved oxidation and shear stability.
- Better anti-corrosion protection.
- Formulator flexibility, largest product grade offering available.

KRL Shear Stability

Tapered Roller Bearing Shear Test (CEC L-45-T-99) @ 60 °C/20 hrs
Polymer Concentration in SN 150 MO = 20 wt%



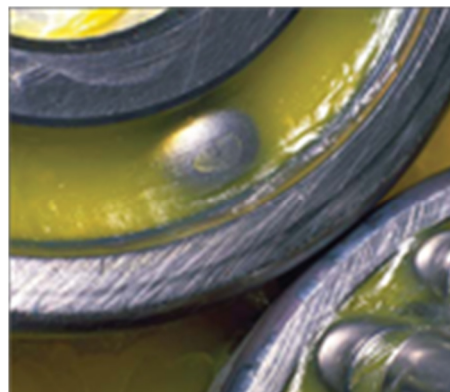
APPLICATION MARKETS

- Automotive & Industrial Gear Oils and Food-grade greases.
- Two-Stroke/2-T Oils, Marine and Hydraulic Oils.
- Metal Working Fluids (MWF): rolling, cutting, drawing, forging.
- Bright stock replacement, Thickeners, LDPE Compressor Oils.
- Wire rope and Anti-corrosion Products.

SAE 40		wt%
<i>Indopol H-1500</i>	17.0	
Brightstock 150		59.0
150 SN	83.0	41.0
Measured Properties		
Kv @ 100C (cSt)	14.4	13.9
Kv @ 40C (cSt)	112	136
Viscosity Index (VI)	131	99
Pour point (°C)	-15	-9

REGULATORY APPROVALS

- All grades Kosher Certified, as manufactured.
- NSF White Book™ listing: H1, HX-1.
- U.S. FDA clearance under Title 21-indirect food contact.



For additional information on Indopol polybutenes or to request samples, email us at indopol@ineos.com

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