



Specialty Oils

hyrax® Polybutene (P.I.B)



Note:

All information supplied by or on behalf of Hyrax Oil in relation to its products, whether in the nature of data, recommendations or otherwise, is supported by rigorous laboratory work and research and believed to be reliable. Typical test data are average values only. Minor variations to typical properties not affecting the performance of the product are to be expected in normal manufacturing circumstances.

Description

Hyrax Polybutene (P.I.B) belongs to the synthetic hydrocarbon family in that it is produced by chemical reactions carried out in chemical plants. The starting material is isobutylene gas whereby the fluid is produced through the catalytic polymerization of this gas. Hence this product is called polyisobutylene fluid or simply polybutene.

Hyrax Polybutene (P.I.B) is colorless, practically non-toxic, and exhibits little or no odor. It is non-drying and does not leave residues when volatilized or thermally decomposed. It is characterized by inherently low dissipation factor and stability against oxidation and contamination.

Benefits

- Permanently non-drying
- Colorless (water white) and non-staining
- Soluble in a wide range of organic solvents
- Tacky
- Completely hydrophobic
- Excellent electrical insulator
- Non-corrosive
- Stable to light and air
- Very low moisture transmission rates

Performance

- IEC 60963

Typical Characteristics

Properties	Method / Applicable ASTM Number		Values
Physical			
Molecular Weight, M _n	Gel Permeation Chromatography	Modified D3536	910
Polydispersity Index, M _w /M _n	Gel Permeation Chromatography	Modified D3536	1.6
Flash Point, °C	Cleveland Open Cup	D92	>210
Turbidity (NTU)	Nephelometric	D5180	<4
Acid Number, mgKOH/g	Titrimetric	D974	<0.03
Bromine Number, Br ² /100g	Titrimetric	IP 129/87	16.5
Bromine Index, mgBr ² /100g	Titrimetric	D2710	-
Chlorine, ppm	X-Ray Fluorescence	N/A	40
Metals, ppm	Inductively Coupled Plasma Spec	N/A	
Na			<1
K			<1
Fe			<1
Specific Gravity at 15.5°C		D1298	0.888-0.890
Glass Transition Temperature, T _g , °C	Differential Scanning Calorimetry	N/A	-69.6
Pour Point, °C		D97	-7
Viscosity Index		D2270	125
Viscosity (cSt) at 100°C	Kinematic	D445	210 ±10
Refractive Index		D1218	1.494
Total Sulphur Content, ppm	X-Ray Analysis	N/A	<5