

# INEOS Oligomers

## Typical Properties

### Panalane<sup>®</sup> Hydrogenated Polybutene Grade: H-300E

TYPICAL PROPERTIES*	METHOD/ASTM NUMBER (IF APPLICABLE)		VALUE
Molecular Weight, $M_n$	Gel Permeation Chromatography	modified D 3536	1300
Polydispersity Index, $M_w/M_n$	Gel Permeation Chromatography	modified D 3536	1.65
Flash Point (°C)	Cleveland Open Cup Pensky-Martens Closed cup	D 92 D 93	>235 >160
Surface Tension. Dynes/cm, 25 °C			80.9
Acid Number (mg KOH/g)	Titrimetric	D 974	<0.1
Appearance (Clear & Bright)	Visual	n/a	C&B
Chlorine (ppm)	X-Ray Fluorescence	n/a	<1
Metals (ppm): Na K Fe	Inductively Coupled Plasma Spec.	n/a	<1 <1 <1
Specific Gravity (at 15.5 °C)		D 1298	0.885
Glass Transition Temperature, $T_g$ (°C)	Differential Scanning Calorimetry	n/a	-
Pour Point (°C)		D 97	2
Viscosity, cP, 99 °C	Brookfield		587
Viscosity (SUS) Temp (°C)	Saybolt	D 2161	2930 100
Refractive Index		D 1218	1.498
Total Sulfur (ppm)	X-Ray Analysis	n/a	< 5
Iodine Value	Titrimetric	n/a	<1.6

\*Note: Not a Sales Specification, data based upon testing of randomly selected lots of product.

Technical information contained herein is furnished without charge or obligation, and is given and accepted at recipient's sole risk. Because conditions of use may vary and are beyond our control, INEOS makes no representation about, and is not responsible or liable for the accuracy or reliability of data, nor for toxicological effects or Industrial Hygiene requirements associated with particular uses of any product described herein. Nothing contained in this document shall be considered a recommendation for any use that may infringe patent rights, or an endorsement of any particular material, equipment, service, or other item not supplied by INEOS. The "Properties" and "Applications" listed in this document are not specifications. They are provided as information only and in no way modify, amend, enlarge, or create any specification or warranty, and ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXCLUDED.

The name INEOS is a trademark of INEOS Capital Limited.  
September, 2008