

General Sales Specification

| Property | Method | Grades: | 175 | 1105 | 1160 | 1285 | 1350 |
|----------------------------|------------|---------|------|-------|--------|--------|--------|
| Kinematic Viscosity, cSt | ASTM D445 | 100°C | 86 | 220 | 647 | 3121 | 4090 |
| | | 70°C | 287 | 840 | 2801 | 13172 | 17481 |
| | | 40°C | 1721 | 5600 | 19809 | 80106 | 107277 |
| | | 20°C | 7582 | 21200 | 111436 | 346926 | 465790 |
| Flash Point °C | ASTM D92 | COC | >140 | >185 | >210 | >210 | >210 |
| Specific Gravity @ 15.6 °C | ASTM D4052 | | 0.89 | 0.90 | 0.91 | 0.92 | 0.92 |
| Color, APHA | ASTM D1209 | | <70 | <50 | <50 | <50 | <50 |
| Haze, photometric | ASTM D6181 | | <4 | <4 | <4 | <4 | <4 |

Supplemental Data - Nominal¹

| | | | | | | | |
|--|-------------|------|--------|--------|--------|--------|--------------------|
| Molecular Weight, Mn | Proprietary | | 750 | 1026 | 1555 | 2925 | 3365 |
| Flash Point °C | ASTM D93 | PMCC | 145 | 155 | 165 | 200 | 209 |
| Water, ppm | ASTM D1533 | | 25 | 25 | 25 | 25 | 25 |
| Chlorine, ppm | ASTM D4327 | | <1 | <1 | <1 | <1 | <1 |
| Sulfur, ppm | ASTM D2622 | | <1 | <1 | <1 | <1 | <1 |
| Aromatics, ppm | HPLC | | <1 | <1 | <1 | <1 | <1 |
| Viscosity Index | ASTM D2270 | | 118 | 144 | 187 | 294 | 307 |
| Refractive Index | ASTM D1218 | | 1.4922 | 1.4971 | 1.5029 | 1.5065 | 1.5054 |
| Pour Point °C | ASTM D97 | | -18 | -6 | 3 | 12 | 21 |
| Dielectric Breakdown Voltage, KV | ASTM D877 | | 50 | 50 | 50 | 50 | 50 |
| Power Factor @ 100°C, (x10 ⁻⁶) | ASTM D924 | | 80 | 80 | 80 | 80 | 80 |
| Dissipation Factor @ 100°C, (x10 ⁻⁶) | ASTM BS5737 | | 80 | 80 | 80 | 80 | 80 |
| Acid Number | ASTM D974 | | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Saponification Number, mg KOH/g | ASTM D94 | | <1 | <1 | <1 | <1 | <1 |
| Bromine Number, g Br ₂ /100g | ASTM 1159 | | 20.6 | 15.7 | 10.0 | 5.9 | 4.8 ⁽²⁾ |
| Evaporation Loss, 10 hrs@99°C, wt% | ASTM D972 | | 1.80 | 0.53 | 0.24 | 0.10 | <0.10 |

1 - The property data listed herein is subject to change without notice. The nominal data are based upon randomly selected samples of product and are believed to represent average values. However, TPC Group does not warrant that its products comply with the non-specification data.

2 - Calculated

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