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Material Safety Data Sheets may be obtained through www.therminol.com or from Environmental Operations, Solutia Inc. Heat transfer fluids are intended only for indirect heating purposes. Under no circumstances should this product contact or in any way contaminate food, animal feed, food products, food packaging materials, food chemicals, pharmaceuticals or any items which may directly or indirectly be ultimately ingested by humans. Any contact may contaminate these items to the extent that their destruction may be required. Precautions against ignitions and fires should be taken with this product.

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Technical Bulletin 7239175B
(Supersedes 9175A) +400°C

THERMINOL® LT

Heat Transfer Fluid by Solutia

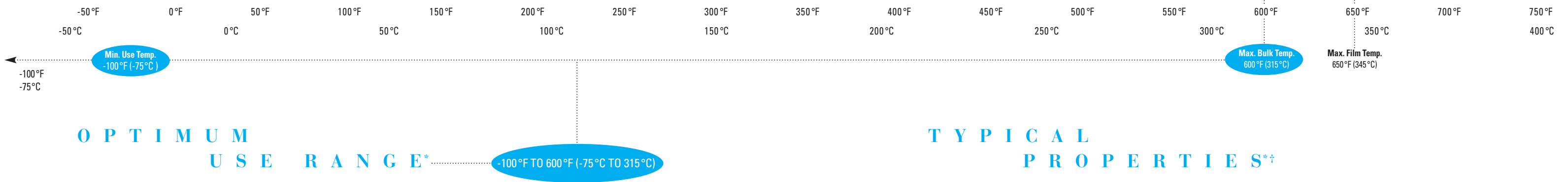
Low Temperature Range Heat Transfer Fluid

-100°F to

600°F

+700°F
+350°C
+600°F
+300°C
+500°F
+250°C
+400°F
+200°C
+150°C +300°F
+100°C +200°F
+50°C
+100°F
0°C
0°F
-50°C
-100°F





Physical and Chemical Characteristics

Therminol® LT is a synthetic aromatic heat transfer fluid. It can be used in both the liquid and vapor phase. With a boiling point of 358°F, Therminol LT can be used in the liquid phase from -100°F to 358°F at ambient pressure or above 358°F with system pressurization. This fluid has a flash point of 134°F (Pensky-Martens) and appropriate fire safety should be included in system designs.

Therminol LT is easily pumpable down to its minimum use temperature.

THERMINOL® LT

Heat Transfer Fluid by **Solutia**

Product Stewardship

The American Chemistry Council's (ACC) Responsible Care Program is an integral part of Solutia's Commitment to the Environment, Safety and Health and a key program to support our right-to-operate philosophy. The Product Stewardship Code is one of six codes of practice that make up the Responsible Care Program. The Product Stewardship Code links Solutia with our customers in an effort to follow our products throughout their life-cycle to foster proper use, handling and disposal practices.

A Therminol Product Steward is available to help product users understand health, safety and environmental requirements and to encourage proper use and disposal of Solutia's heat transfer fluids. The Product Steward may be contacted through Sales Representatives, Marketing Technical Service or directly by calling 1-800-433-6997 and asking for Product Stewardship assistance.

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TYPICAL PROPERTIES†

| | |
|--|-------------------------------------|
| Appearance | Clear, light yellow liquid |
| Composition | Alkyl substituted aromatic |
| Flash Point (Pensky-Martens) | 57°C (134°F) |
| Fire Point (ASTM D-92) | 66°C (150°F) |
| Autoignition Temperature (ASTM E-659)† | 412°C (774°F) |
| Kinematic Viscosity at -50°C | 4.17 mm ² /s (cSt) |
| at 40°C | 0.81 mm ² /s (cSt) |
| at 100°C | 0.48 mm ² /s (cSt) |
| Density at 25°C | 862 kg/m ³ (7.19 lb/gal) |
| Coefficient of Thermal Expansion at 100°C | 0.00108/°C (0.00060/°F) |
| Surface Tension in Air at 25°C | 28 dyn/cm |
| Average Molecular Weight | 134 |
| Freezing Point | -75°C (-103°F) |
| Minimum Temperatures for Fully Developed Turbulent Flow, Liquid (Re = 10000): | |
| 10 ft/sec, 1-in tube | -66°C (-87°F) |
| 20 ft/sec, 1-in tube | < -73°C (-100°F) |
| Minimum Temperatures for Fully Developed Turbulent Flow, Vapor (Re = 10000): | |
| 10 ft/sec, 1-in tube | 139°C (283°F) |
| 20 ft/sec, 1-in tube | 116°C (241°F) |
| Normal Boiling Point | 181°C (358°F) |
| Heat of Vaporization at Maximum Use Temperature 315°C | 223 kJ/kg (95.7 Btu/lb) |
| Optimum Use Range, Liquid | -75°C to 315°C (-100°F to 600°F) |
| Optimum Use Range, Vapor | 181°C to 315°C (358°F to 600°F) |
| Maximum Film Temperature | 345°C (650°F) |
| Pseudocritical Temperature | 377°C (710°F) |
| Pseudocritical Pressure | 34.5 bar (500 psia) |
| Pseudocritical Density | 298 kg/m ³ (2.49 lb/gal) |

* These data are based upon samples tested in the laboratory and are not guaranteed for all samples.

† Does not constitute an express warranty. See NOTICE on the back page of this bulletin.

1 ASTM E-659 replaces the former ASTM D-2155 method.

| Temperature | | Liquid Density | | | Liquid Heat Capacity | | Liquid Enthalpy** | | Liquid Thermal Conductivity | | | Liquid Viscosity | | | Vapor Pressure | | | | Temperature | |
|-------------|-----|----------------|--------|-------|---------------------------|-----------|-------------------|-------|-----------------------------|-------------------|---------|------------------|----------------|---------------|----------------|-------|---------|-------|-------------|-----|
| °F | °C | lb/gal | lb/ft³ | kg/m³ | Btu/lb-°F [cal/(g-°C)] | kJ/(kg·K) | Btu/lb | kJ/kg | Btu/ (ft-h-°F) | kcal/ (m-h-°C) | W/(m·K) | lb/(ft-h) | cSt [mm²/s] | cP [mPa·s] | psia | mm Hg | kgf/cm² | kPa | °F | °C |
| -100 | -73 | 7.83 | 58.6 | 938 | 0.344 | 1.44 | -37.0 | -86.1 | 0.0825 | 0.1227 | 0.1426 | 24.4 | 10.75 | 10.09 | | | | | -100 | -73 |
| -80 | -62 | 7.76 | 58.0 | 930 | 0.354 | 1.48 | -30.0 | -69.8 | 0.0812 | 0.1209 | 0.1405 | 14.6 | 6.48 | 6.03 | | | | | -80 | -62 |
| -60 | -51 | 7.69 | 57.5 | 921 | 0.365 | 1.53 | -22.8 | -53.1 | 0.0800 | 0.1191 | 0.1384 | 9.64 | 4.33 | 3.99 | | | | | -60 | -51 |
| -40 | -40 | 7.62 | 57.0 | 913 | 0.375 | 1.57 | -15.4 | -35.9 | 0.0788 | 0.1172 | 0.1362 | 6.86 | 3.11 | 2.84 | | | | | -40 | -40 |
| -20 | -29 | 7.55 | 56.4 | 904 | 0.386 | 1.61 | -7.8 | -18.2 | 0.0775 | 0.1154 | 0.1341 | 5.16 | 2.36 | 2.13 | 0.0003 | 0.016 | 0.00002 | 0.002 | -20 | -29 |
| 0 | -18 | 7.47 | 55.9 | 896 | 0.396 | 1.66 | 0.0 | 0.0 | 0.0763 | 0.1135 | 0.1320 | 4.04 | 1.86 | 1.67 | 0.0009 | 0.045 | 0.00006 | 0.006 | 0 | -18 |
| 20 | -7 | 7.40 | 55.4 | 887 | 0.406 | 1.70 | 8.0 | 18.6 | 0.0751 | 0.1117 | 0.1298 | 3.27 | 1.52 | 1.35 | 0.0023 | 0.118 | 0.00016 | 0.016 | 20 | -7 |
| 40 | 4 | 7.33 | 54.8 | 878 | 0.416 | 1.74 | 16.3 | 37.7 | 0.0738 | 0.1098 | 0.1277 | 2.71 | 1.27 | 1.12 | 0.0054 | 0.282 | 0.00038 | 0.038 | 40 | 4 |
| 60 | 16 | 7.26 | 54.3 | 869 | 0.426 | 1.78 | 24.7 | 57.3 | 0.0726 | 0.1080 | 0.1255 | 2.29 | 1.09 | 0.947 | 0.0121 | 0.627 | 0.00085 | 0.084 | 60 | 16 |
| 80 | 27 | 7.18 | 53.7 | 860 | 0.436 | 1.83 | 33.3 | 77.4 | 0.0713 | 0.1061 | 0.1233 | 1.97 | 0.945 | 0.814 | 0.0253 | 1.31 | 0.00178 | 0.175 | 80 | 27 |
| 100 | 38 | 7.11 | 53.2 | 852 | 0.446 | 1.87 | 42.1 | 97.9 | 0.0701 | 0.1043 | 0.1212 | 1.71 | 0.832 | 0.708 | 0.0500 | 2.59 | 0.00352 | 0.345 | 100 | 38 |
| 120 | 49 | 7.03 | 52.6 | 843 | 0.456 | 1.91 | 51.2 | 118.9 | 0.0688 | 0.1024 | 0.1190 | 1.51 | 0.737 | 0.624 | 0.0941 | 4.87 | 0.00662 | 0.649 | 120 | 49 |
| 140 | 60 | 6.96 | 52.0 | 833 | 0.466 | 1.95 | 60.4 | 140.3 | 0.0675 | 0.1005 | 0.1168 | 1.34 | 0.665 | 0.554 | 0.169 | 8.76 | 0.0119 | 1.17 | 140 | 60 |
| 160 | 71 | 6.88 | 51.5 | 824 | 0.476 | 1.99 | 69.8 | 162.2 | 0.0663 | 0.0986 | 0.1146 | 1.20 | 0.602 | 0.496 | 0.293 | 15.1 | 0.0206 | 2.02 | 160 | 71 |
| 180 | 82 | 6.80 | 50.9 | 815 | 0.485 | 2.03 | 79.4 | 184.5 | 0.0650 | 0.0967 | 0.1124 | 1.08 | 0.549 | 0.447 | 0.488 | 25.2 | 0.0343 | 3.37 | 180 | 82 |
| 200 | 93 | 6.72 | 50.3 | 806 | 0.495 | 2.07 | 89.2 | 207.3 | 0.0637 | 0.0948 | 0.1102 | 0.980 | 0.503 | 0.405 | 0.788 | 40.7 | 0.0554 | 5.43 | 200 | 93 |
| 220 | 104 | 6.64 | 49.7 | 796 | 0.504 | 2.11 | 99.2 | 230.5 | 0.0624 | 0.0929 | 0.1080 | 0.893 | 0.464 | 0.369 | 1.23 | 63.8 | 0.0868 | 8.51 | 220 | 104 |
| 240 | 116 | 6.56 | 49.1 | 786 | 0.514 | 2.15 | 109.4 | 254.1 | 0.0612 | 0.0910 | 0.1058 | 0.817 | 0.430 | 0.338 | 1.88 | 97.4 | 0.132 | 13.0 | 240 | 116 |
| 260 | 127 | 6.48 | 48.5 | 776 | 0.523 | 2.19 | 119.7 | 278.2 | 0.0599 | 0.0891 | 0.1036 | 0.751 | 0.400 | 0.310 | 2.80 | 145 | 0.197 | 19.3 | 260 | 127 |
| 280 | 138 | 6.40 | 47.8 | 766 | 0.532 | 2.23 | 130.3 | 302.8 | 0.0586 | 0.0872 | 0.1013 | 0.692 | 0.374 | 0.286 | 4.08 | 211 | 0.287 | 28.1 | 280 | 138 |
| 300 | 149 | 6.31 | 47.2 | 756 | 0.542 | 2.27 | 141.0 | 327.7 | 0.0573 | 0.0852 | 0.0991 | 0.641 | 0.350 | 0.265 | 5.82 | 301 | 0.409 | 40.1 | 300 | 149 |
| 320 | 160 | 6.22 | 46.6 | 746 | 0.551 | 2.30 | 151.9 | 353.1 | 0.0560 | 0.0833 | 0.0968 | 0.594 | 0.329 | 0.246 | 8.14 | 421 | 0.572 | 56.1 | 320 | 160 |
| 340 | 171 | 6.14 | 45.9 | 735 | 0.560 | 2.34 | 163.0 | 378.9 | 0.0547 | 0.0814 | 0.0946 | 0.553 | 0.311 | 0.229 | 11.2 | 579 | 0.787 | 77.1 | 340 | 171 |
| 358 | 181 | 6.06 | 45.3 | 726 | 0.568 | 2.38 | 173.2 | 402.5 | 0.0535 | 0.0797 | 0.0926 | 0.519 | 0.296 | 0.215 | 14.7 | 760 | 1.03 | 101 | 358 | 181 |
| 360 | 182 | 6.05 | 45.2 | 724 | 0.569 | 2.38 | 174.3 | 405.2 | 0.0534 | 0.0795 | 0.0923 | 0.516 | 0.294 | 0.213 | 15.1 | 783 | 1.06 | 104 | 360 | 182 |
| 380 | 193 | 5.95 | 44.5 | 713 | 0.579 | 2.42 | 185.8 | 431.9 | 0.0521 | 0.0775 | 0.0901 | 0.482 | 0.279 | 0.199 | 20.2 | 1040 | 1.42 | 139 | 380 | 193 |
| 400 | 204 | 5.86 | 43.8 | 702 | 0.588 | 2.46 | 197.5 | 459.0 | 0.0508 | 0.0756 | 0.0878 | 0.451 | 0.266 | 0.187 | 26.5 | 1370 | 1.87 | 183 | 400 | 204 |
| 420 | 216 | 5.76 | 43.1 | 690 | 0.598 | 2.50 | 209.4 | 486.6 | 0.0494 | 0.0736 | 0.0855 | 0.424 | 0.254 | 0.175 | 34.4 | 1780 | 2.42 | 237 | 420 | 216 |
| 440 | 227 | 5.66 | 42.3 | 678 | 0.608 | 2.54 | 221.4 | 514.6 | 0.0481 | 0.0716 | 0.0832 | 0.398 | 0.243 | 0.165 | 44.1 | 2280 | 3.10 | 304 | 440 | 227 |
| 460 | 238 | 5.55 | 41.5 | 666 | 0.618 | 2.58 | 233.7 | 543.1 | 0.0468 | 0.0697 | 0.0810 | 0.375 | 0.233 | 0.155 | 56.0 | 2890 | 3.93 | 386 | 460 | 238 |
| 480 | 249 | 5.45 | 40.7 | 652 | 0.628 | 2.63 | 246.1 | 572.0 | 0.0455 | 0.0677 | 0.0786 | 0.354 | 0.224 | 0.146 | 70.2 | 3630 | 4.94 | 484 | 480 | 249 |
| 500 | 260 | 5.33 | 39.9 | 639 | 0.639 | 2.67 | 258.8 | 601.5 | 0.0441 | 0.0657 | 0.0763 | 0.334 | 0.216 | 0.138 | 87.2 | 4510 | 6.13 | 601 | 500 | 260 |
| 520 | 271 | 5.21 | 39.0 | 625 | 0.650 | 2.72 | 271.7 | 631.4 | 0.0428 | 0.0637 | 0.0740 | 0.316 | 0.209 | 0.131 | 107 | 5550 | 7.55 | 740 | 520 | 271 |
| 540 | 282 | 5.09 | 38.1 | 610 | 0.663 | 2.78 | 284.8 | 662.0 | 0.0414 | 0.0617 | 0.0717 | 0.299 | 0.203 | 0.124 | 131 | 6780 | 9.22 | 904 | 540 | 282 |
| 560 | 293 | 4.95 | 37.1 | 594 | 0.678 | 2.84 | 298.2 | 693.1 | 0.0401 | 0.0597 | 0.0694 | 0.284 | 0.198 | 0.117 | 159 | 8210 | 11.2 | 1090 | 560 | 293 |
| 580 | 304 | 4.81 | 36.0 | 576 | 0.696 | 2.91 | 312.0 | 725.1 | 0.0388 | 0.0577 | 0.0670 | 0.270 | 0.193 | 0.112 | 191 | 9860 | 13.4 | 1310 | 580 | 304 |
| 600 | 316 | 4.66 | 34.8 | 558 | 0.719 | 3.01 | 326.1 | 757.9 | 0.0374 | 0.0556 | 0.0647 | 0.256 | 0.190 | 0.106 | 228 | 11800 | 16.0 | 1570 | 600 | 316 |

* These data are based upon samples tested in the laboratory and are not guaranteed for all samples.

** The enthalpy basis is liquid at 0°F

† Does not constitute an express warranty. See NOTICE on the back page of this bulletin.

| Temperature | | Vapor Density | | Vapor Heat Capacity | | Heat of Vaporization | | Vapor Enthalpy*** | | Vapor Thermal Conductivity | | | Vapor Viscosity | | | Temperature | |
|-------------|-----|---------------|--------|-----------------------------|-----------|----------------------|-------|-------------------|-------|----------------------------|-------------------|---------|-----------------|----------------|---------------|-------------|-----|
| °F | °C | lb/ft³ | kg/m³ | Btu/(lb-°F) [cal/(g-°C)] | kJ/(kg·K) | Btu/lb | kJ/kg | Btu/lb | kJ/kg | Btu/ (ft-h-°F) | kcal/ (m-h-°C) | W/(m·K) | lb/(ft-h) | cSt [mm²/s] | cP [mPa·s] | °F | °C |
| -100 | -73 | | | 0.183 | 0.766 | 212.0 | 492.7 | 174.9 | 406.6 | 0.0030 | 0.0044 | 0.0051 | 0.0105 | | 0.00434 | -100 | -73 |
| -80 | -62 | | | 0.194 | 0.813 | 208.7 | 485.2 | 178.7 | 415.4 | 0.0033 | 0.0049 | 0.0057 | 0.0111 | | 0.00458 | -80 | -62 |
| -60 | -51 | | | 0.206 | 0.860 | 205.6 | 477.8 | 182.7 | 424.7 | 0.0036 | 0.0054 | 0.0063 | 0.0116 | | 0.00482 | -60 | -51 |
| -40 | -40 | | | 0.217 | 0.908 | 202.4 | 470.4 | 186.9 | 434.5 | 0.0040 | 0.0059 | 0.0069 | 0.0122 | | 0.00506 | -40 | -40 |
| -20 | -29 | | | 0.228 | 0.955 | 199.2 | 463.0 | 191.4 | 444.8 | 0.0044 | 0.0065 | 0.0075 | 0.0128 | | 0.00530 | -20 | -29 |
| 0 | -18 | 0.00002 | 0.0004 | 0.239 | 1.002 | 196.1 | 455.7 | 196.1 | 455.7 | 0.0047 | 0.0070 | 0.0082 | 0.0134 | | 0.00554 | 0 | -18 |
| 20 | -7 | 0.00006 | 0.0010 | 0.251 | 1.049 | 192.9 | 448.5 | 201.0 | 467.1 | 0.0051 | 0.0076 | 0.0088 | 0.0140 | | 0.00578 | 20 | -7 |
| 40 | 4 | 0.00014 | 0.0022 | 0.262 | 1.095 | 189.8 | 441.3 | 206.1 | 479.0 | 0.0055 | 0.0081 | 0.0095 | 0.0146 | 2760 | 0.00603 | 40 | 4 |
| 60 | 16 | 0.00029 | 0.0047 | 0.273 | 1.142 | 186.8 | 434.1 | 211.4 | 491.4 | 0.0059 | 0.0087 | 0.0101 | 0.0152 | 1340 | 0.00628 | 60 | 16 |
| 80 | 27 | 0.00059 | 0.0094 | 0.284 | 1.188 | 183.7 | 427.0 | 217.0 | 504.4 | 0.0063 | 0.0093 | 0.0108 | 0.0158 | 694 | 0.00652 | 80 | 27 |
| 100 | 38 | 0.00112 | 0.0179 | 0.295 | 1.234 | 180.6 | 420.0 | 222.8 | 517.8 | 0.0067 | 0.0099 | 0.0115 | 0.0164 | 378 | 0.00677 | 100 | 38 |
| 120 | 49 | 0.00203 | 0.0326 | 0.306 | 1.280 | 177.6 | 412.9 | 228.8 | 531.8 | 0.0071 | 0.0105 | 0.0122 | 0.0170 | 216 | 0.00702 | 120 | 49 |
| 140 | 60 | 0.00353 | 0.0566 | 0.317 | 1.325 | 174.6 | 405.9 | 235.0 | 546.2 | 0.0075 | 0.0111 | 0.0130 | 0.0176 | 128 | 0.00727 | 140 | 60 |
| 160 | 71 | 0.00592 | 0.0947 | 0.328 | 1.370 | 171.6 | 399.0 | 241.4 | 561.2 | 0.0079 | 0.0118 | 0.0137 | 0.0182 | 79.4 | 0.00752 | 160 | 71 |
| 180 | 82 | 0.00956 | 0.153 | 0.338 | 1.415 | 168.7 | 392.1 | 248.1 | 576.6 | 0.0083 | 0.0124 | 0.0144 | 0.0188 | 50.8 | 0.00777 | 180 | 82 |
| 200 | 93 | 0.0150 | 0.240 | 0.349 | 1.459 | 165.7 | 385.2 | 254.9 | 592.5 | 0.0088 | 0.0131 | 0.0152 | 0.0194 | 33.4 | 0.00802 | 200 | 93 |
| 220 | 104 | 0.0228 | 0.365 | 0.359 | 1.503 | 162.8 | 378.4 | 262.0 | 608.9 | 0.0092 | 0.0137 | 0.0160 | 0.0200 | 22.7 | 0.00828 | 220 | 104 |
| 240 | 116 | 0.0338 | 0.542 | 0.370 | 1.547 | 159.8 | 371.6 | 269.2 | 625.7 | 0.0097 | 0.0144 | 0.0168 | 0.0206 | 15.7 | 0.00853 | 240 | 116 |
| 260 | 127 | 0.0491 | 0.786 | 0.380 | 1.590 | 156.9 | 364.7 | 276.6 | 643.0 | 0.0102 | 0.0151 | 0.0176 | 0.0212 | 11.2 | 0.00878 | 260 | 127 |
| 280 | 138 | 0.0697 | 1.12 | 0.390 | 1.634 | 154.0 | 357.9 | 284.3 | 660.7 | 0.0106 | 0.0158 | 0.0184 | 0.0218 | 8.08 | 0.00903 | 280 | 138 |
| 300 | 149 | 0.0971 | 1.56 | 0.401 | 1.676 | 151.0 | 351.0 | 292.0 | 678.8 | 0.0111 | 0.0165 | 0.0192 | 0.0224 | 5.96 | 0.00928 | 300 | 149 |
| 320 | 160 | 0.133 | 2.13 | 0.411 | 1.719 | 148.1 | 344.1 | 300.0 | 697.3 | 0.0116 | 0.0172 | 0.0200 | 0.0230 | 4.47 | 0.00952 | 320 | 160 |
| 340 | 171 | 0.179 | 2.87 | 0.421 | 1.761 | 145.1 | 337.2 | 308.1 | 716.1 | 0.0121 | 0.0180 | 0.0209 | 0.0236 | 3.41 | 0.00977 | 340 | 171 |
| 358 | 181 | 0.231 | 3.70 | 0.430 | 1.799 | 142.3 | 330.9 | 315.5 | 733.4 | 0.0125 | 0.0186 | 0.0216 | 0.0242 | 2.70 | 0.01000 | 358 | 181 |
| 360 | 182 | 0.238 | 3.81 | 0.431 | 1.803 | 142.0 | 330.1 | 316.4 | 735.3 | 0.0126 | 0.0187 | 0.0217 | 0.0242 | 2.63 | 0.01002 | 360 | 182 |
| 380 | 193 | 0.312 | 4.99 | 0.441 | 1.845 | 139.0 | 323.0 | 324.8 | 754.9 | 0.0131 | 0.0195 | 0.0226 | 0.0248 | 2.06 | 0.01027 | 380 | 193 |
| 400 | 204 | 0.404 | 6.47 | 0.451 | 1.886 | 135.8 | 315.7 | 333.3 | 774.7 | 0.0136 | 0.0202 | 0.0235 | 0.0254 | 1.62 | 0.01051 | 400 | 204 |
| 420 | 216 | 0.518 | 8.29 | 0.461 | 1.928 | 132.6 | 308.2 | 342.0 | 794.8 | 0.0141 | 0.0210 | 0.0244 | 0.0260 | 1.30 | 0.01076 | 420 | 216 |
| 440 | 227 | 0.657 | 10.5 | 0.471 | 1.970 | 129.3 | 300.5 | 350.7 | 815.1 | 0.0146 | 0.0218 | 0.0253 | 0.0266 | 1.04 | 0.01100 | 440 | 227 |
| 460 | 238 | 0.827 | 13.3 | 0.481 | 2.012 | 125.9 | 292.5 | 359.5 | 835.6 | 0.0152 | 0.0226 | 0.0262 | 0.0272 | 0.848 | 0.01124 | 460 | 238 |
| 480 | 249 | 1.03 | 16.6 | 0.491 | 2.055 | 122.3 | 284.3 | 368.4 | 856.3 | 0.0157 | 0.0234 | 0.0272 | 0.0278 | 0.693 | 0.01148 | 480 | 249 |
| 500 | 260 | 1.28 | 20.6 | 0.502 | 2.099 | 118.6 | 275.6 | 377.3 | 877.0 | 0.0163 | 0.0242 | 0.0281 | 0.0284 | 0.570 | 0.01172 | 500 | 260 |
| 520 | 271 | 1.58 | 25.4 | 0.512 | 2.144 | 114.6 | 266.4 | 386.3 | 897.9 | 0.0168 | 0.0250 | 0.0291 | 0.0289 | 0.471 | 0.01196 | 520 | 271 |
| 540 | 282 | 1.95 | 31.2 | 0.524 | 2.191 | 110.4 | 256.7 | 395.2 | 918.6 | 0.0174 | 0.0259 | 0.0301 | 0.0295 | 0.391 | 0.01220 | 540 | 282 |
| 560 | 293 | 2.39 | 38.3 | 0.536 | 2.241 | 105.9 | 246.2 | 404.1 | 939.3 | 0.0180 | 0.0267 | 0.0310 | 0.0301 | 0.324 | 0.01243 | 560 | 293 |
| 580 | 304 | 2.93 | 47.0 | 0.549 | 2.297 | 101.0 | 234.7 | 412.9 | 959.7 | 0.0185 | 0.0276 | 0.0321 | 0.0306 | 0.270 | 0.01267 | 580 | 304 |
| 600 | 316 | 3.60 | 57.6 | 0.564 | 2.362 | 95.4 | 221.8 | 421.5 | 979.8 | 0.0191 | 0.0285 | 0.0331 | 0.0312 | 0.224 | 0.01290 | 600 | 316 |

* Vapor properties given are for saturated vapor.

** These data are based upon samples tested in the laboratory and are not guaranteed for all samples.

*** The enthalpy basis is liquid at 0°F.

† Does not constitute an express warranty. See NOTICE on the back page of this bulletin.