

ERHA14X

| | | Whole | | | | | | | | |
|--|----------------|---------------------------|-------------------------------------|-----------------------------------|---|--------------------------------------|------------------------------------|--|---------------------------------------|---------|
| | | crude - 200 to 1499 | Butane and Lighter -200 to 60 | Lt. Naphtha C5- 165F 60 to 165 | Hvy Naphtha 165 - 330F 165 to 330 | Kerosene 330 - 480F 330 to 480 | Diesel 480 - 650F 480 to 650 | Vacuum Gas Oil 650 - 1000F 650 to 1000 | Vacuum Residue 1000F+ 1000 to 1499 | |
| | | IBP,F,BP,F | IBP,60,F | 60,165,F | 165,330,F | 330,480,F | 480,650,F | 650,1000,F | 1000,F,BP,F | |
| Cut volume, % | YLD,V,% | 100 | 1.78 | 5.41 | 17.02 | 19.17 | 24.36 | 26.34 | 5.94 | |
| API Gravity | API,none | 35.398 | 127.60 | 80.78 | 54.13 | 40.43 | 30.31 | 20.62 | 16.89 | |
| Specific Gravity (60/60F) | SPG,60F,none | 0.84782 | 0.55 | 0.67 | 0.76 | 0.82 | 0.87 | 0.93 | 0.95 | |
| Carbon, wt % | _C,% | 86.6593 | 82.36 | 83.94 | 86.11 | 86.37 | 87.05 | 87.29 | 86.60 | |
| Hydrogen, wt % | _H2,% | 13.0724 | 17.64 | 16.06 | 13.89 | 13.58 | 12.78 | 12.26 | 12.21 | |
| Pour point, F | PPT,F | 13.1 | -231.06 | -187.52 | -134.40 | -64.31 | 10.56 | 80.69 | 97.07 | |
| Neutralization number (TAN), MG/GM | ACI,mgKOH/g | 0.32094 | 0.05 | 0.04 | 0.06 | 0.08 | 0.20 | 0.68 | 0.75 | |
| Sulfur, wt% | SUL,% | 0.16994 | 0.00 | 0.00 | 0.00 | 0.04 | 0.16 | 0.29 | 0.57 | |
| Viscosity at 20C/68F, cSt | VIS,20C,cSt | 5.46952 | 0.38 | 0.49 | 0.80 | 2.02 | 8.17 | 410.20 | 1194828.37 | |
| Viscosity at 40C/104F, cSt | VIS,40C,cSt | 3.38418 | 0.33 | 0.42 | 0.65 | 1.46 | 4.60 | 96.74 | 64590.85 | |
| Viscosity at 50C/122F, cSt | VIS,50C,cSt | 2.77262 | 0.31 | 0.39 | 0.59 | 1.28 | 3.64 | 55.02 | 20100.32 | |
| Mercaptan sulfur, ppm | MER,ppm | 1.23634 | 0.10 | 0.70 | 1.97 | 1.10 | 0.49 | 0.12 | 0.01 | |
| Nitrogen, ppm | TN2,ppm | 754.908 | 0.00 | 0.00 | 0.28 | 11.06 | 126.62 | 1279.08 | 5263.11 | |
| CCR, wt% | MCRT,% | 0.81036 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 11.38 | |
| N-Heptane Insolubles (C7 Asphaltenes), wt% | AS7,% | 0.00843 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.13 | |
| Nickel, ppm | NIK,ppm | 4.21231 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 63.10 | |
| Vanadium, ppm | VAN,ppm | 0.10137 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.52 | |
| Calcium, ppm | _CA,ppm | 0.602 | | | | | | | | |
| Reid Vapor Pressure (RVP) Whole Crude, psi | RVP,psi | 6 | 130.28 | 12.95 | 1.19 | 0.04 | 0.00 | 0.00 | 0.00 | |
| Hydrogen Sulfide (dissolved), ppm | HSD,ppm | 0 | | | | | | | | |
| Salt content, ptb | SAL,lb/1000bbl | 13.9 | | | | | | | | |
| Paraffins, vol % | PAR,V,% | 26.0636 | 100.00 | 79.80 | 39.73 | 38.27 | 27.13 | 13.69 | 3.77 | |
| Naphthenes, vol % | NAP,V,% | 33.8465 | 0.00 | 20.20 | 43.15 | 39.77 | 45.61 | 42.97 | 21.17 | |
| Aromatics (FIA), vol % | ARO,V,% | 25.6468 | 0.00 | 0.00 | 17.12 | 21.96 | 27.26 | 43.35 | 75.06 | |
| Distillation type, D- | | 86 | 86 | 86 | 86 | 86 | 86 | 1160 | 1160 | |
| ASTM IBP, F | D86P,0.5%,F | D1160P,0.5%,F | 29.017 | -116.08 | 100.95 | 208.32 | 367.71 | 508.78 | 674.30 | 1022.41 |
| 5 vol%, F | D86P,5%,F | D1160P,5%,F | 173.784 | -103.92 | 102.92 | 211.69 | 369.93 | 511.89 | 681.44 | 1028.73 |
| 10 vol%, F | D86P,10%,F | D1160P,10%,F | 227.865 | -86.76 | 103.69 | 213.92 | 372.01 | 513.86 | 686.60 | 1033.25 |
| 20 vol%, F | D86P,20%,F | D1160P,20%,F | 309.938 | -41.36 | 107.20 | 221.36 | 379.50 | 520.85 | 706.10 | 1050.54 |
| 30 vol%, F | D86P,30%,F | D1160P,30%,F | 389.17 | 1.99 | 115.30 | 228.47 | 386.53 | 527.77 | 726.88 | 1070.04 |
| 40 vol%, F | D86P,40%,F | D1160P,40%,F | 453.966 | 15.96 | 120.70 | 238.03 | 395.58 | 537.35 | 749.55 | 1092.72 |
| 50 vol%, F | D86P,50%,F | D1160P,50%,F | 512.019 | 20.41 | 131.04 | 247.53 | 404.27 | 547.03 | 774.27 | 1119.36 |
| 60 vol%, F | D86P,60%,F | D1160P,60%,F | 573.506 | 29.91 | 135.61 | 258.14 | 413.49 | 558.08 | 805.67 | 1155.77 |
| 70 vol%, F | D86P,70%,F | D1160P,70%,F | 644.424 | 33.89 | 139.84 | 268.83 | 422.46 | 569.46 | 841.19 | 1200.92 |
| 80 vol%, F | D86P,80%,F | D1160P,80%,F | 747.603 | 37.13 | 143.56 | 280.43 | 431.61 | 582.36 | 882.62 | 1259.88 |
| 90 vol%, F | D86P,90%,F | D1160P,90%,F | 881.542 | 40.33 | 147.26 | 292.07 | 440.50 | 595.88 | 933.22 | 1344.00 |
| 95 vol%, F | D86P,95%,F | D1160P,95%,F | 926.918 | 44.55 | 153.72 | 301.61 | 448.94 | 606.13 | 963.91 | 1404.11 |
| ASTM EP, F | D86P,99.5%,F | D1160P,99.5%,F | 1026.3 | 56.02 | 159.54 | 312.04 | 458.49 | 618.33 | 996.90 | 1492.34 |
| Freeze point, F | FPT,F | | 69.401 | -219.18 | -176.32 | -122.53 | -52.49 | 22.57 | 92.49 | 117.63 |
| Smoke point, mm | SMO,mm | | 15.6246 | 38.37 | 36.28 | 31.85 | 21.44 | 10.54 | 3.10 | 1.16 |
| Naphthalenes (D1840), vol% | NPH,V,% | | 5.66245 | 0.00 | 0.00 | 0.00 | 2.73 | 8.68 | 9.45 | 8.99 |
| Viscosity at 100C/212F, cSt | VIS,100C,cSt | | 1.32643 | 0.24 | 0.29 | 0.39 | 0.74 | 1.56 | 8.47 | 383.74 |
| Viscosity at 150C/302F, cSt | VIS,150C,cSt | | 0.809 | 0.20 | 0.23 | 0.30 | 0.49 | 0.90 | 3.03 | 44.54 |
| Cetane Index 1990 (D4737) | CET,none | | 38.1533 | 168.80 | 47.01 | 26.81 | 38.56 | 44.81 | 46.86 | 52.28 |
| Cloud point, F | CPT,F | | 60.9501 | -226.52 | -183.45 | -130.21 | -59.48 | 15.10 | 85.06 | 110.44 |
| Aniline pt, F | ANI,F | | 154.173 | 200.56 | 158.25 | 125.23 | 133.54 | 149.34 | 171.41 | 212.30 |