



Crude NIGERIAN BRASS **API** 37,4
Location NIGERIA **Sulphur** 0,11

| CRUDE OIL | | | YIELDS AND CHARACTERISTICS OF PRODUCTS | | | | | | | | | | | TBP Distillation | | |
|--------------------|--------------------|--------|--|-----------|--------|--------|-----------|---------|---------|---------|-------------|----------|--------|------------------|-----------|----------|
| | | | GAS | NAPHTHAS | | | KEROSENES | | GASOILS | | V.DIST. | RESIDUES | | | | |
| TBP Range : | | | C1-C4 | C5-80 [c] | 80-160 | 80-180 | 160-230 | 180-230 | 230-370 | 370-400 | 370-530 | 370+ | 400+ | 530+ | Cut Point | %m/m Cum |
| TBP Yield | %m/m | | 1,31 | 6,52 | 20,28 | 24,62 | 14,52 | 10,19 | 33,15 | 4,72 | 17,86 | 24,21 | 19,49 | 6,35 | | |
| TBP Yield | %v/v | | 1,93 | 8,01 | 22,22 | 26,76 | 14,91 | 10,36 | 31,78 | 4,37 | 16,11 | 21,40 | 17,03 | 5,29 | | |
| Density @15°C | Kg/l | 0,8367 | 0,5691 | 0,6816 | 0,7638 | 0,7695 | 0,8151 | 0,8229 | 0,8726 | 0,9039 | 0,9274 | 0,9467 | 0,9577 | 1,0054 | C1 | 0,00 |
| API Gravity @ 60°F | | 37,4 | | | | | | | | | | | | | C2 | 0,00 |
| Viscosity @ 20°C | mm ² /s | 3,45 | | | | | | | | | | | | | C3 | 0,13 |
| Viscosity @ 50°C | VBN | | | | | | 3,90 | 5,15 | 16,54 | 26,31 | 31,65 | 35,04 | 37,16 | 44,57 | IC4 | 0,50 |
| Sulphur | %m/m | 0,11 | | 0,0018 | 0,0012 | 0,0022 | 0,0016 | 0,0019 | 0,10 | 0,17 | 0,20 | 0,26 | 0,28 | 0,42 | NC4 | 1,31 |
| Mercaptan Sulphur | ppm | 5 | | 0 | | | | 3 | | | 8,826524413 | | | | IC5 | 2,36 |
| Hydrogen Sulphide | %m/m | | | | | | | | | | | | | | NC5 | 3,38 |
| Acidity | mgKOH/g | 0,23 | | 0,03 | | | 0,04 | 0,00 | 0,16 | 0,50 | 0,65 | 0,70928 | 0,76 | 0,79 | 80 | 7,84 |
| Paraffins | %v/v | | | 74,1 | 37,6 | 37,4 | | | | | | | | | 100 | 13,53 |
| Naphthenes | %v/v | | | 22,3 | 48,0 | 47,3 | | | | | | | | | 120 | 18,70 |
| Aromatics | %v/v | | | 3,6 | 14,4 | 15,4 | 20,1 | 20,1 | | | | | | | 140 | 23,92 |
| N+2A | | | | 29,4 | 76,8 | 78,0 | | | | | | | | | 160 | 28,12 |
| Smoke Pt. | mm | | | | | | 23 | 22 | | | | | | | 180 | 32,45 |
| Freezing Pt. | °C | | | | | | -55 | -50 | | | | | | | 210 | 38,21 |
| Cloud Pt. | °C | | | | | | | | -6 | +27 | | | | | 230 | 42,64 |
| Pour Pt. | °C | <-36 | | | | | | | -9 | +27 | | +42 | +45 | +57 | 250 | 47,66 |
| Cetane Index | | | | | | | | | 46,4 | 60,6 | | | | | 270 | 53,61 |
| Total Nitrogen | %m/m | | | | | | | | | 0,066 | 0,11 | 0,24 | 0,28 | 0,61 | 290 | 59,34 |
| Basic Nitrogen | ppm | | | | | | | | | 380 | 566 | 1016 | 1170 | 2280 | 320 | 66,79 |
| Nickel | ppm | 2 | | | | | | | | | <1 | 10 | 12 | 37 | 350 | 72,58 |
| Vanadium | ppm | 0,2 | | | | | | | | | <2 | 1 | 1 | 3 | 370 | 75,79 |
| P. Value | | | | | | | | | | | | | >5 | | 400 | 80,51 |
| Asphaltenes in NC7 | %m/m | 0,1 | | | | | | | | | | 0,30 | 0,40 | 1,15 | 530 | 93,65 |
| R.C.C. | %m/m | 0,8 | | | | | | | | | 0,2 | 3,3 | 4,2 | 12,1 | 550 | 94,72 |
| Penetration @ 25°C | dmm | | | | | | | | | | | | | | | |
| UOP K Factor | | 11,7 | | | | | | | | | 11,7 | 11,7 | 11,6 | | | |

[c] calculated value

Updated 2011

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