

PRODUCT DATA SHEET

NYTRO[®] BIO 300X

| PROPERTY | UNIT | TEST METHOD | SPECIFICATION LIMITS | | TYPICAL DATA |
|---|--------------------|-----------------|---------------------------|----------------|-----------------------|
| | | | MIN | MAX | |
| 1 - Function | | | | | |
| Viscosity, 40°C | mm ² /s | ISO 3104 | | 4.5 | 3.7 |
| Viscosity, -30°C | mm ² /s | ISO 3104 | | 800 | 55 |
| Pour point | °C | ISO 3016 | | -45 | -60 |
| Water content | mg/kg | IEC 60814 | | 30 | <20 |
| Breakdown voltage | | | | | |
| - Before treatment | kV | IEC 60156 | 30 | | 40-60 |
| - After treatment | kV | IEC 60296 | 70 | | >70 |
| Density, 20°C | kg/dm ³ | ISO 12185 | | 0.895 | 0.785 |
| DDF at 90°C | | IEC 60247 | | 0.005 | <0.001 |
| 2 - Refining/stability | | | | | |
| Appearance | | IEC 60296 | Clear, free from sediment | | complies |
| Acidity | mg KOH/g | IEC 62021 | | 0.01 | <0.01 |
| Interfacial tension | mN/m | EN 14210 | 43 | | 49 |
| Total sulphur content | % | ISO 14596 | | 0.05 | <0.01 |
| Corrosive sulphur | | DIN 51353 | non-corrosive | | non-corrosive |
| Potentially corrosive sulphur | | IEC 62535 | non-corrosive | | non-corrosive |
| Corrosive sulphur | | ASTM D 1275 | non-corrosive | | non-corrosive |
| DBDS | mg/kg | IEC 62697-1 | | not detectable | not detectable |
| Antioxidant | wt % | IEC 60666 | | 0.24 | 0.22 |
| Metal passivator additives | mg/kg | IEC 60666 | | not detectable | not detectable |
| 2-Furfural and related compounds content | mg/kg | IEC 61198 | | 0.05 | <0.05 |
| Aromatic content | % | IEC 60590 | | | <1.2 |
| 3 - Performance | | | | | |
| Oxidation stability at 120°C,500 h | | IEC 61125 C | | | |
| Total acidity | mg KOH/g | | | 0.30 | 0.01 |
| Sludge | wt % | | | 0.05 | <0.01 |
| DDF at 90°C | | | | 0.050 | 0.010 |
| 4 - Health, safety and environment (HSE) | | | | | |
| Flash point, PM | °C | ISO 2719 | 140 | | 145 |
| PCA | wt % | DMSO extraction | | | <0.1 |
| PCB | | IEC 61619 | not detectable | | not detectable |
| Biodegradability | % | OECD 301 | Readily Biodegradable | | Readily Biodegradable |
| Bio-Based carbon | % | ASTM D 6866 | 98 | | 99 |

NYTRO BIO 300X is an inhibited bio-based insulating fluid with extremely good electrical and thermal properties as well as excellent oxidation stability. This product meets IEC 60296 Ed.4 (2012), special applications. Breakdown voltage after treatment as per definition given in IEC 60296, section 6.4.

Bio-based Hydrocarbon Insulating Fluid

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