

| Property  | Unit                     | Test Method | Specification Limits      |        | Typical Data              |
|---|--------------------------|-------------|---------------------------|--------|---------------------------|
|   |                          |             | Min                       | Max    |                           |
| <b>1 - Function</b>                             |                          |             |                           |        |                           |
| Viscosity, 40°C                                 | mm <sup>2</sup> /s (cSt) | ISO 3104    |                           | 8      | 7.6                       |
| Viscosity, -30°C                                | mm <sup>2</sup> /s (cSt) | ISO 3104    |                           | 800    | 705                       |
| Pour point                                      | °C                       | ISO 3016    |                           | -51    | -63                       |
| Water content                                   | mg/kg                    | IEC 60814   |                           | 30     | < 20                      |
| Breakdown voltage                               | kV                       | IEC 60156   |                           |        |                           |
| - Before treatment                              | kV                       | IEC 60156   | 30                        |        | 40-60                     |
| - After treatment                               | kV                       | IEC 60296   | 70                        |        | > 70                      |
| Density, 20°C                                   | kg/dm <sup>3</sup>       | ISO 12185   |                           | 0.895  | 0.874                     |
| DDF at 90°C                                     |                          | IEC 60247   |                           | 0.005  | < 0.001                   |
| <b>2 - Refining/stability</b>                   |                          |             |                           |        |                           |
| Colour  |                          | ISO 2049    |                           | < 0.5  | < 0.5                     |
| Appearance at 15°C                              |                          | IEC 60296   | Clear, Free from Sediment |        | Clear, Free from Sediment |
| Acidity   | mg KOH/g                 | IEC 62021   |                           | 0.01   | < 0.01                    |
| Interfacial tension at 25°C                     | mN/m                     | IEC 62961   | 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 D1275  | Non-Corrosive             |        | Non-Corrosive             |
| DBDS  | mg/kg                    | IEC 62697-1 | Not Detectable            |        | Not Detectable            |
| Antioxidants                                    | wt %                     | IEC 60666   | 0.08                      | 0.40   | 0.28                      |
| Metal passivator additives                      | mg/kg                    | IEC 60666   | Not Detectable            |        | Not Detectable            |
| Other additives *                               |                          |             | None                      |        | None                      |
| 2-Furfural and related compounds content        | mg/kg                    | IEC 61198   |                           | < 0.05 | < 0.05                    |
| Aromatic content                                | %                        | IEC 60590   |                           |        | 5                         |
| Stray gassing under thermo-oxidative stress     |                          | IEC 60296   |                           |        |                           |
| - Hydrogen                                      | µl/l                     | clause A.4  |                           | < 50   | < 5                       |
| - Methane                                       | µl/l                     | clause A.4  |                           | < 50   | < 1                       |
| - Ethane  | µl/l                     | clause A.4  |                           | < 50   | < 1                       |
| <b>3 - Performance</b>                          |                          |             |                           |        |                           |
| Oxidation stability at 120°C, 500 h             |                          | IEC 61125   |                           |        |                           |
| - Total acidity                                 | mg KOH/g                 | IEC 61125   |                           | 0.3    | 0.05                      |
| - Sludge  | wt %                     | IEC 61125   |                           | 0.05   | < 0.01                    |
| - DDF at 90°C                                   |                          | IEC 61125   |                           | 0.050  | 0.006                     |
| <b>4 - Health, safety and environment (HSE)</b> |                          |             |                           |        |                           |
| Flash Point, PM                                 | °C                       | ISO 2719    | 140                       |        | 142                       |
| PCA   | wt %                     | IP 346      |                           | < 3.0  | < 3.0                     |
| PCB   | mg/kg                    | IEC 61619   | Not Detectable            |        | Not Detectable            |

\*this product contains no undeclared additives

NYTRO 10XN is a Super Grade inhibited insulating oil meeting IEC 60296 Ed. 5 (2020) and is Type A, TVAI and it is 100% recyclable. Breakdown voltage after treatment as per definition in IEC 60296, section 6.4. It also meets ASTM D3487-16 type II (excluding gassing tendency).

Severely hydrotreated insulating oil

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