An inhibited high-grade oil, Nytro Lyra X conforms to IEC 60296 Edition 4.0 – including the fulfilment of specific requirements for special applications. Developed and formulated to deliver strong resistance to oil degradation, Nytro Lyra X provides excellent oxidation stability for a longer transformer life with less maintenance.

Designed for heavy duty

This product has been specially developed for use in oil-filled electrical equipment – including power and distribution transformers, rectifiers, circuit breakers and switchgears.

Performance and benefits

Very good heat transfer. Thanks to low viscosity and viscosity index, this high grade offers extremely good heat transfer characteristics, ensuring heat is efficiently removed from core and windings.

Excellent oxidation stability. Developed and formulated to deliver superb resistance to oil degradation, this grade provides excellent oxidation stability for enhanced transformer life and minimum maintenance.

Very good low temperature properties. Naphthenic characteristics allow the transformer to start at the lowest possible temperature – without using pour point depressants.

High dielectric strength. This insulating oil both meets and exceeds the toughest demands on dielectric strength – when stored and handled correctly.

Product description

Nytro Lyra X fulfils the requirements for IEC 60296 Edition 4.0 fully inhibited oil. Nynas classify this product as a high grade.

HIGH GRADE

Nytro Lyra X

High performance insulating oil

Nytro Lyra X is rigorously analysed and passes the following corrosion tests:

- ASTM D1275 method B

- IEC 62535
- DIN 51353

In accordance with IEC 60296 Edition 4.0, all additives are declared.

There's more to us than this

We're delighted you chose one of our transformer oils. If you have any questions about other products and services, get in touch with your local Nynas contact. Besides top quality oils, we offer a wide range of services, including rapid delivery worldwide, sample analysis, training, seminars and much more. All you have to do is ask. Find out more at www.nynas.com



PRODUCT DATA SHEET

Nytro Lyra X

| PROPERTY | UNIT | TEST METHOD | SPECIFICATION LIMITS | | TYPICAL DATA |
|--|--------------------|---------------|---------------------------|----------------|----------------|
| | | | MIN | MAX | |
| 1 - Function | | | | | |
| Viscosity, 40°C | mm²/s | ISO 3104 | | 12.0 | 9.3 |
| Viscosity, -30°C | mm²/s | ISO 3104 | | 1800 | 926 |
| Pour point | °C | ISO 3016 | | -40 | -48 |
| 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 | 0.870 |
| 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 | 40 | | 50 |
| 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 B | non-corrosive | | non-corrosive |
| DBDS | mg/kg | IEC 62697-1 | | not detectable | not detectable |
| Antioxidant | wt % | IEC 60666 | 0.08 | 0.4 | 0.38 |
| 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 | | | 5 |
| 3 - Performance | | | | | |
| Oxidation stability at 120°C,500 h | | IEC 61125 C | | | |
| Total acidity | mg KOH/g | | | 0.3 | 0.06 |
| Sludge | wt % | | | 0.05 | <0.02 |
| DDF at 90°C | | | | 0.050 | 0.020 |
| 4 - Health, safety and environme | ent (HSE) | | | | |
| Flash point, PM | °C | ISO 2719 | 135 | | 152 |
| PCA | wt % | IP 346 | | 3 | <3 |
| PCB | | IEC 61619 | not detectable | | not detectable |

Nytro Lyra X is an inhibited insulating oil with extremely good electrical and excellent ageing properties meeting IEC 60296 Ed.4 (2012), special applications.

Severely Hydrotreated Insulating Oil Issuing date: 2012-04-01

