

## SYNTHETIC LUBRICATING OIL

OX-14 – O-147 – MIL-PRF-6085 D Amd.1 – AIR 3511/A Iss.2  
DEF STAN 91-49 Iss.1

### Description

Nycolube 11B is a synthetic lubricating oil with a viscosity of 13 cSt at 40°C, based on neopolyol esters. It is inhibited against oxidation and corrosion.

### Application

Nycolube 11B is primarily used as lubricant for aircraft instruments and electronic equipments.

It combines a low volatility, desirable for instruments such as automatic pilot (low fogging), with extremely low pour point. It is also used for general lubrication of moving aircraft parts (pins, locks, etc...).



| Characteristic   | Unit                                 | Result        | Limit*                  | Test method        |
|--|--------------------------------------|---------------|-------------------------|--------------------|
| - Appearance   | -                                    | conform       | limpid<br>homogeneous   | visual examination |
| - Color  | -                                    | 1.0           | max. 5.0                | ASTM D1500         |
| - Acid number  | mg KOH/g                             | 0.05          | report                  | ASTM D974          |
| - Kinematic viscosity at<br>54.4°C<br>-54°C  | mm <sup>2</sup> /s                   | 8.20<br>10624 | mini. 8.0<br>max. 12000 | ASTM D445          |
| - Pour point   | °C                                   | < -60         | < -57                   | ASTM D97           |
| - Flash point , COC  | °C                                   | 208           | min. 185                | ASTM D92           |
| - Evaporation loss 22 h at 120°C<br>Mass fraction  | %                                    | 1.2           | max. 1.8                | ASTM D972          |
| - Precipitation number   | cm <sup>3</sup> /100 cm <sup>3</sup> | 0.0           | 0.0                     | ASTM D91           |
| - Stability at low temperature   | -                                    | pass          | MIL-PRF-6085            | MIL-PRF-6085       |
| - Corrosion and oxidative stability<br>168 h at 121°C<br>Change after test<br>a. Total acid number<br>b. Viscosity at 54.4°C<br>c. Metal weight change | mg KOH/g<br>mm <sup>2</sup> /s<br>-  | 0.2<br>0.0    | max. 0.5<br>max. +/-5.0 | FTM-S-791-5308     |
| cadmium  | mg/cm <sup>2</sup>                   | 0.0           | max. +/- 0.2            |                    |
| copper   | mg/cm <sup>2</sup>                   | 0.0           | max. +/- 0.2            |                    |
| steel  | mg/cm <sup>2</sup>                   | 0.0           | max. +/- 0.2            |                    |
| aluminium  | mg/cm <sup>2</sup>                   | 0.0           | max. +/- 0.2            |                    |
| magnesium  | mg/cm <sup>2</sup>                   | 0.0           | max. +/- 0.2            |                    |

\* Specification MIL-PRF-6085 D

The values above are typical values. They do not constitute any contractual commitment.  
Sales specifications are available on request. The present technical data sheet replaces all the previous editions.