Nyfrost 68 is an upper mid-viscosity, wax-free, hydrotreated naphthenic ISO VG 68 base oil for use as a refrigeration fluid.

## **Applications**

Nyfrost 68 has higher flash point and high thermal and chemical stability, including being non-corrosive versus iron, copper and aluminium. This product is recommended for use in refrigerators using refrigerants such as Isobutane (R600a), Ammonia (R717) and CFC's (R12 and R 22).

#### Performance and benefits

The benefits of using naphthenic base oils for this application are the high solvent power and the very good low temperature properties leading to good floc points for the recommended refrigerant-oil mixture. Nyfrost 68 is wax-free, it is characterized by having a low pour point and good cold flowing properties, efficient heat transfer and good thermal stability.

## **Product description**

Nyfrost 68 is a hydrotreated naphthenic base oil, classified as an API Group V base oil. The viscosity at 40°C is 68 cSt for this product.

### There's more to us than this

We're delighted you chose one of our base 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, training, seminars and much more. All you have to do is ask. Find out more at www.nynas.com



# NYFROST 68

| PROPERTY                            | UNIT              | TEST METHOD | SPECIFICATION LIMITS |       | TYPICAL DATA |
|-------------------------------------|-------------------|-------------|----------------------|-------|--------------|
|                                     |                   | ASTM        | MIN                  | MAX   |              |
| Physical                            |                   |             |                      |       |              |
| Density, 15°C                       | g/cm <sup>3</sup> | D 4052      | 0.904                | 0.924 | 0.913        |
| Viscosity, 40°C                     | mm²/s (cSt)       | D 445       | 61.2                 | 74.8  | 69           |
| Viscosity, 100°C                    | mm²/s (cSt)       | D 445       |                      |       | 6.6          |
| Flash Point, COC                    | °C                | D 92        |                      |       | 200          |
| Flash Point, PM                     | °C                | D 93        | 174                  |       | 185          |
| Pour Point                          | °C                | D 97        |                      | -24   | -30          |
| Colour                              |                   | D 1500      |                      | 1.5   | 1.0          |
| Cold flow determination in a U-tube | °C                | DIN 51568   |                      |       |              |
| Floc point - R12                    | °C                | DIN 51351   |                      |       | -29          |
| Floc point - R22                    | °C                | ASHRAE 86   |                      |       |              |
| Floc point - R600A                  | °C                | DIN 51351   |                      |       | -50          |
| Chemical                            |                   |             |                      |       |              |
| Copper Strip, 100°C, 3hrs,          |                   | D 130       |                      | 1     | 1            |
| Sulphur                             | %                 | D 2622      |                      |       | 0.06         |
| Neutralization value                | mg KOH/g          | D 974       |                      | 0.03  | <0.01        |
| Hydrocarbon Type Analysis           |                   | IR-method   |                      |       |              |
| C <sub>A</sub>                      | %                 |             |                      |       | 15           |
| Carbon-Type Composition             |                   |             |                      |       |              |
| $C_{_{A}}$                          | %                 |             |                      |       | 11           |
| $C_{_{N}}$                          | %                 |             |                      |       | 40           |
| $C_{_{P}}$                          | %                 |             |                      |       | 49           |
| Electrical                          |                   |             |                      |       |              |
| Breakdown voltage                   | kV                | IEC 156     | 40                   |       | >45          |

Nyfrost 68 is a naphthenic based refrigerating oil meeting specification BS 2626: 1992.

Severely Hydrotreated Base Oil Issuing date: 2016-11-01

