

# Technical Data Sheet POLYGLYKOL B 01/20

CLARIANT INTERNATIONAL LTD

Rothausstrasse 61 4132 Muttenz Switzerland

BUSINESS UNIT INDUSTRIAL & CONSUMER SPECIALTIES

www.ics.clariant.com www.clariant.com

# Base oil component for industrial applications

| Composition                                  | Polypropylene glycol monobutylether   |  |
|--|---|--|
|  | CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> (OCH <sub>2</sub> CHCH <sub>3</sub> ) |  |
|  | n OH  |  |
| Product properties <sup>1</sup>              | 11 011  |  |
| Appearance (20°C)                            | Clear viscous liquid  |  |
| Color index [APHA] EN 1557                   | Max. 100  |  |
| Refractive index (20°C) DIN 51432            | Approx. 1.445 -1.447  |  |
| Molecular weight                             | Approx. 950 g/mol   |  |
| Water content DIN 51777                      | Max. 0.5 %  |  |
| pH value (10% in EtOH/water 1:1)             | Approx. 5.0 – 7.0   |  |
| Density (20°C) DIN 51757                     | Approx. 0.978 – 0.982 g/cm <sup>3</sup>   |  |
| Viscosity (40°C) DIN 51562                   | Approx. 30 mm <sup>2</sup> /s   |  |
| Viscosity (100°C) DIN 51562                  | (100°C) DIN 51562 Approx. 6 mm²/s   |  |
| Viscosity index ASTM D2270                   | Approx. 178   |  |
| Pour point ISO 3016                          | Approx50°C  |  |
| Flash point DIN 51376                        | Approx. 225°C   |  |
| Ignition temperature DIN 51794               | Approx. 345°C   |  |
| Four ball test DIN 51350/3B                  | Approx. 0.65 mm   |  |
| (60min. / 300N)                              |   |  |
| Seizure / welding load Approx. 1200 / 1500 N |   |  |

# Profile

# **Product properties**

Polyglykol B 01/20 is a clear neutral, viscous liquid at room temperature. Polyglykol B 01/20 is insoluble in water but soluble in many polar organic solvents like acetone or methanol. Polyglykol B 01/20 can be dispersed much better in pure hydrocarbon solvents than the more hydrophilic B 11-type polyglycols. Polyglykol B 01/20 displays a very low solidification point of  $-50^{\circ}\mathrm{C}$  and no evaporation loss even at temperatures as high as 100°C.

Page 1 of 3 POLYGLYKOL B 01/20 August 2021

<sup>&</sup>lt;sup>1</sup> These characteristics are for guidance only and not to be taken as product specifications. The tolerances are given in the product specification sheet. For further product properties, specifications, safety and ecological data, please refer to the MSDS.



Polyglykol Bo1-types have a very low hygroscopy compared to other Polyglykol-types.

### CLARIANT INTERNATIONAL LTD

Rothausstrasse 61 4132 Muttenz Switzerland

BUSINESS UNIT INDUSTRIAL & CONSUMER SPECIALTIES

www.ics.clariant.com www.clariant.com

# Solubility

Table 2

| Lubic -     |              |             |             |           |            |
|-------------|--------------|-------------|-------------|-----------|------------|
|             | Water        | Nynas T22   | Rapseed oil | Sunflower | Shell      |
|             |              |             |             | oil       | Ondina 917 |
|             | -            | ✓           | ✓           | ✓         | ✓          |
| <b>&gt;</b> |              |             |             |           |            |
| Solubility  | Priolube     | Hostagliss® | PAO         |           |            |
| olu         | 1943         | TPO         | (SpectraSyn |           |            |
| $\infty$    | (Trimelliate | (Polyol     | 4)          |           |            |
|             | ester)       | ester)      |             |           |            |
|             | ✓            | ✓           | -           |           |            |
|             |              |             |             |           |            |

- ✓ Soluble
- Insoluble

# **Application**

Based on their physical and chemical characteristics B 01-type polyglycols are used for a wide variety of applications.

Fields of industrial application:

- Base oil component for high performance lubricants with low friction coefficients, excellent wear properties and good thermal stability
- Lubricant for refrigeration compressors
- Lubricating component of metalworking fluids
- Component of auxiliaries for leather and textile processing
- Component for defoamer formulations
- Reactive alcohol component in chemical reactions
- Solvent for dyes and inks
- Dispersant for pigments

To increase the stability against thermo oxidative degradation, Lubricant Additive 1655 can be used.

Page 2 of 3 POLYGLYKOL B 01/20 August 2021



# Sustainability

Polyglykol B 01/20 is readily biodegradable. It is included in the LuSC-list (Lubricant Substance Classification list) and meets the EU Ecolabel criteria for lubricants (Commission decision 2018 / 1702 / EU).

# Safety

Please see Material Safety Data Sheet before handling the material.

# Storage behaviour

When stored in a cold, dry place in a closed container Polyglykol B 01/20 can be kept for at least two years.

CLARIANT INTERNATIONAL LTD

Rothausstrasse 61 4132 Muttenz Switzerland

BUSINESS UNIT INDUSTRIAL & CONSUMER SPECIALTIES

www.ics.clariant.com www.clariant.com

This information corresponds to the present state of our know ledge and is intended as a general description of our products and their possible applications. Clariant makes no warranties, express or implied, as to the information's accuracy, adequacy, sufficiency or freedom from defect and assumes no liability in connection with any use of this information. Any user of this product is responsible for determining the suitability of Clariant's products for its particular application.\* Nothing included in this information waives any of Clariant's General Terms and Conditions of Sale, which control unless it agrees otherwise in writing. Any existing intellectual/industrial property rights must be observed. Due to possible changes in our products and applicable national and international regulations and laws, the status of our products could change. Material Safety Data Sheets providing safety precautions, that should be observed when handling or storing Clariant products, are available upon request and are provided in compliance with applicable law. You should obtain and review the applicable Material Safety Data Sheet information before handling any of these products. For additional information, please contact

\* For sales to customers located within the United States and Canada the following applies in addition:
NO EXPRESS OR IMPLIED WARRANTY IS MADE OF THE MERCHANTABILITY, SUITABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE OF ANY PRODUCT OR SERVICE

© 2021 Clariant International Ltd, Rothausstrasse 61, 4132 Muttenz, Switzerland





Page 3 of 3 **POLYGLYKOL B 01/20** August 2021