## **Technical Data Sheet**

















### Foodmax Gear PAG

#### Synthetic gear and chain oil for the food industry

#### Description

Foodmax Gear PAG is a range of high performance long life synthetic food grade gear oils particularly suited for the lubrication of drive chains, conveyor chains, gearboxes and reduction units. The fluids are provided with excellent anti wear properties, high stability to oxidation and a low pour point. Will resists mechanic shearing, very stable to ageing and present a very good viscosity - temperature behaviour. Foodmax Gear PAG fluids are adhesive and will therefore prevent from wear during start-up operation.

Foodmax Gear PAG is NSF H1 registered for incidental food contact.

#### **Benefits**

- Extremely good oxidation stability extending lubricant life
- Excellent water resistant properties, demulsibility ensures total separation of water from oil
- Adhesive
- Penetrates to chain links and pins reducing wear and extending chain life
- Non-dripping
- Protects from corrosion even in presence of alkali materials
- Extremely wide temperature range

• Excellent resistance to high loads

#### **Applications**

Foodmax Gear PAG is intended for the lubrication of gearboxes, endless screws, circulating systems, bearings and conveyor chains (up to 240 °C). Foodmax Gear PAG suits very well in very wet environments as it remains unaffected by water.

#### **Cautions**

The product is neither miscible with mineral base oils nor with different nature synthetic oils. So it is advisable to proceed to a good cleaning (flushing) of the mechanism to be lubricated prior to use the oil.

#### Performance level

- FZG gear test (DIN 51354)
  A/8.3/90: > 12
- FAG FE 8 roller bearing test weight loss roller (mg): 12
- Vickers vane pump test V 104-c-10 (DIN 51389 part 2): 2

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- Brugger-Weingarten max load (N/mm2): 47
- Busak & Shamban micro scratching test: pass
- DIN 51517-3
- David Brown Type G

All performance data on this Technical Data Sheet are indicative only and can vary during production

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#### Typical performance data

|                                   | Unit              | Test Method | 150       | 220    | 320    | 460    | 680    | 1000  |
|-----------------------------------|-------------------|-------------|-----------|--------|--------|--------|--------|-------|
| Colour                            |                   | Visual      | Colorless |        |        |        |        |       |
| Density @ 20 °C                   | g/cm <sup>3</sup> | ASTM D1298  | 0.998     | 1.0    | 1.0    | 1.0    | 1.072  | 1.089 |
| Viscosity @ 40 °C                 | mm²/s             | ASTM D445   | 162       | 220    | 320    | 460    | 680    | 1000  |
| Viscosity @ 100 °C                | mm²/s             | ASTM D445   | 27        | 36.5   | 50     | 122    | 122.2  | 163   |
| Viscosity Index                   |                   | ASTM D2270  | 202       | 210    | 220    | 240    | 272    | 284   |
| Flash point                       | °C                | ASTM D92    | 278       | 240    | 240    | 240    | 287    | 296   |
| Pour point                        | °C                | ASTM D97    | -39       | -40    | -40    | -30    | -33    | -30   |
| TAN (max)                         | mgKOH/g           | ISO 6618    | 1.6       | 1.2    | 1.2    | 1.2    | 0.2    | 0.2   |
| Copper Corrosion                  | -                 | ASTM D130   | 1a        |        |        |        |        |       |
| 4-ball Wear, 1200 rpm, 75°C, 40kg | -                 | ASTM D4172  | 0.35      | 0.3    | 0.3    | 0.3    | 0.3    | 0.3   |
| 4-ball Weld load, kg              | Kg                | ASTM D-2783 | 160       | 200    | 240    | 260    | 260    | 260   |
| Rust Test                         | -                 | -           |           | Pass   | Pass   | Pass   | Pass   | Pass  |
| FZG load stage                    | -                 | DIN 51354   |           | > 12   | > 12   | > 12   | > 12   | > 12  |
| NSF approval                      | H1                | -           | -         | 141664 | 151742 | 151743 | 159105 | -     |
| Kosher approval                   | -                 | -           | -         | YES    | -      | -      | -      | -     |
| Halal approval                    | -                 | -           | YES       | YES    | YES    | YES    | YES    | YES   |

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