

# GUARDSMAN FOOD MACHINERY GEAR OIL

## ISO 220-460-680

### Product Description:

**GUARDSMAN FM GEAR OILS** are manufactured from high quality HVI food grade hydroprocessed paraffinic base oils and selected synthetic base oils fortified with anti-wear, rust & corrosion inhibitors, and foam inhibitors. Designed for use where H-1 & H-2 gear oils are required.

### Typical Uses:

- Worm gears on industrial equipment requiring food grade gear oils.
- Industrial bronze gears.
- Spiral bevel and double reduction gears.
- Moderately loaded industrial spur, herringbone, helical, and bevel gear sets.
- Flexible couplings.
- Can be used in applications both above and below the food line.
- Ideal for bearings and systems where contamination with water, citrus juice, or food may be held in suspension.
- For use in mist applications not requiring mist control.
- For use in rotary steamers and valves up to 149°C.
- Complies with 178-3570 of title 21 of the Code of Federal Regulations. (FDA)

### Features:

- Full film lubrication provided to protect gears.
- Provides rust and oxidation protection to internal gears and bearings.
- Foam resistance qualities provide longer gear and bearing life.
- Does not thin out at high temperatures.
- Compatible with other food grade gear oils.
- Crystal clear colour.
- No odour.
- Meets FZG Gear test (D-5182) requirements
- Certified Kosher and Halal.
- **MPI Approved C 15**
- **NSF H-1 & H-2** certified

### Typical Properties

| GRADE, ISO            | 220   | 460   | 680  |
|-----------------------|-------|-------|------|
| Gravity, °API         | 32.7  | 28.5  | 28.7 |
| Flash Point, °C (COC) | 230   | >235  | 260  |
| Fire Point, °C        | 277   | 313   | 316  |
| Pour Point, °C        | -13   | - 10  | -13  |
| Viscosity             |       |       |      |
| cSt @ 40°C            | 203.9 | 453.3 | 680  |
| cSt @ 100°C           | 20.4  | 31.6  | 47.4 |
| Viscosity Index       | 117   | 101   | 118  |
| Colour, Saybolt       | 30+   | 30+   | 30+  |

Values shown here are typical and may vary.