



# SAFEMAC GEAR S 220

## ISO VG 220

NSF H1 SYNTHETIC GEAR LUBRICANT FOR THE FOOD AND PHARMACEUTICAL INDUSTRIES

### **USES**

SAFEMAC GEAR S 220 is a synthetic gear lubricant suitable for incidental food contact, as it is NSF H1 certified. SAFEMAC GEAR S 220 is formulated using polyalphaolefin (PAO) synthetic oils reinforced with high-performance additives not containing mineral oils, i.e. MOSH and MOAH-free. SAFEMAC GEAR S 220 is recommended for lubricating loaded gear systems with plain or rolling bearings in the food or pharmaceutical industries, as well as any other industry where lubricants suitable for incidental food contact are required. SAFEMAC GEAR S 220 offers oxidation resistance allowing longer lubrication intervals.

### **PERFORMANCE**

#### Certifications:

NSF  
Cat H1  
NSF Registration N°167385



### **CUSTOMER BENEFITS**

#### **MOSH AND MOAH-FREE • LONG-LASTING**

- Formulation without mineral oils and so without concerning molecules like MOSH and MOAH.
- Extreme pressure additive offering superior protection against high loads.
- Excellent shear resistance ensuring optimal lubrication over time.
- Good wear protection to ensure component durability.
- Viscosity with low sensitivity to temperature variations thanks to its high viscosity index.

## CHARACTERISTICS

	Method	Units	Values
ISO grade	ASTM		ISO VG 220
Colour	Visual	-	Colourless
Type of oil	-	-	PAO synthetic
Density	ISO 12185	-	0.840
Viscosity at 40°C	ISO 3104	mm²/s	220
Viscosity at 100°C	ISO 3104	mm²/s	26
Viscosity index	ISO 2909	-	151
Flash Point	ISO 2592	°C	245
Pour point	ISO 3016	°C	-40
4-ball wear	ISO 20623	mm	0.35
4-ball weld point	ASTM D2783	kg	200
FZG test	DIN 51354-2	-	>12
Copper corrosion (3 hours/100°C)	ISO 2160	-	1a
Operating temperature limits	-	°C	-35 to +120

The values indicated in this characteristics table are typical values given for information purposes only

## RECOMMENDATIONS

SAFEMAC GEAR S 220 is miscible with mineral oils and polyalphaolefin oils. However, it is strongly recommended to clean the oil circulation system thoroughly before first use. SAFEMAC GEAR S 220 is compatible with most seals normally used in food machinery lubrication systems. It is still recommended to carry out a compatibility test (e.g. with EPDM seals). Product life span: 36 months in hermetically sealed containers and normal storage conditions.

Storage conditions: Products should be stored at room temperature, away from water and moisture and separately from other non-H1 lubricants. Products should not be stored at temperatures exceeding 35°C. They should not be exposed to strong sunshine, intense cold or significant temperature variations.

## HEALTH, SAFETY & THE ENVIRONMENT

Health and safety recommendations for this product are found in the safety data sheet (SDS). It is available on request and on the site [www.hafa.fr](http://www.hafa.fr).

This product should not be used for purposes other than those for which it was intended. To dispose of the product after use, please consider the environment and respect local regulations.