



## Optileb™ GT 1810/220

Food machinery gear oil

### Description

Castrol Optileb™ GT 1810/220 (previously called Tribol™ FoodProof 1810) food machinery gear oils are high-performance gear oils especially formulated to meet the stringent requirements of the NSF H1 approval and are designed for use in the food and beverage industries where incidental contact with food is possible. The gear oils are for service in all types of enclosed gear drives where EP and antiwear properties are required. Foaming is controlled by the use of special components and inhibitors.

### Application

Optileb GT 1810/220 food machinery gear oil is used in spur, helical, herringbone, straight or bevel gears where incidental contact with food is possible. They are especially used for heavy duty and shock loads where extreme pressure (EP) characteristics are required.

### Advantages

- Exceptional oxidation resistance which offers a prolonged oil service life.
- High load carrying capacity (as shown by the results of the FZG test (>12 stages))
- Extraordinary antiwear properties due to the optimal use of antiwear additives
- Good water separation properties which makes the oils ideal for use in breweries and the beverage industry
- Feature the requirements to be met by NSF H1 lubricants

## Typical Characteristics

Name	Method	Units	Optileb GT 1810/ 220
ISO Viscosity grade	DIN 51519	-	220
Density @ 15°C / 59°F	ASTM D4052 / ISO 12185 / DIN 51717	kg/m <sup>3</sup>	880
Kinematic Viscosity @ 40°C / 104°F	ASTM D 445 / ISO 3104 / DIN 51550	mm <sup>2</sup> /s	220
Kinematic Viscosity @ 100°C / 212°F	ASTM D 445 / ISO 3104 / DIN 51550	mm <sup>2</sup> /s	20.2
Viscosity Index	ASTM D2270 / ISO 2909	-	106
Flash Point - open cup method	DIN ISO 2592	°C	>240
Pour Point	ISO 3016	°C	< -10
Corrosion Test Test A (distilled water)	DIN 51585	rating	0
Copper Corrosion Test (24hrs @ 120°C)	DIN EN ISO 2160	rating	1
Demulsibility (40-40-0 min)	ISO 6614	-	20
Foam Sequence I - tendency / stability	ISO 6247	ml / ml	< 30 / 0
Foam Sequence II - tendency / stability	ISO 6247	ml / ml	< 30 / 0
Foam Sequence III - tendency / stability	ISO 6247	ml / ml	< 30 / 0
Four Ball Wear test - Wear Scar Diameter (300N / 1 hr)	DIN 51350-3B	mm	< 0,5
Falex wear test (wear teeth)	ASTM DM 2607	-	5
FZG test ( A/8.3/90) scouring load stage	DIN 51354	-	>12

Subject to usual manufacturing tolerances.

## Additional Information

Optileb GT 1810/220 oil may be applied by oil can, oil cup reservoir, splash, spray, mist or by automatic dispensing equipment, central and circulation systems.

Quality standard:

Optileb GT 1810/220 food machinery gear oil exceeds the minimum requirements according to DIN 51517, part 3 for CLP gear oils.

They are lubricants L-CKC (acc. to ISO 6743-6) and exceed the minimum requirements of ISO 12925-1

**This product was previously called Tribol FoodProof 1810/200. The name was changed in 2015.**

Optileb™ GT 1810/220

11 Feb 2015

Castrol, the Castrol logo and related marks are trademarks of Castrol Limited, used under licence.

This data sheet and the information it contains is believed to be accurate as of the date of printing. However, no warranty or representation, express or implied, is made as to its accuracy or completeness. Data provided is based on standard tests under laboratory conditions and is given as a guide only. Users are advised to ensure that they refer to the latest version of this data sheet. It is the responsibility of the user to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations. Material Safety Data Sheets are available for all our products and should be consulted for appropriate information regarding storage, safe handling, and disposal of the product. No responsibility is taken by either BP plc or its subsidiaries for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from hazards inherent in the nature of the material. All products, services and information supplied are provided under our standard conditions of sale. You should consult our local representative if you require any further information.

Castrol Industrial, Technology Centre , Whitchurch Hill , Pangbourne , Reading , RG8 7QR , United Kingdom

[www.castrol.com/industrial](http://www.castrol.com/industrial)