

TIFORA PG



Grease

Heavy metal free special high performance grease for tubing/casing.

APPLICATIONS

Threading of casings of oil drilling equipment

Recommendation

- **TIFORA PG** is an innovative heavy metal-free lubricating grease specifically developed for both protection and "make up" of 'premium' (casing/tubing) connections. Tifora PG has been specially designed for Carbon-Steel and 13Cr connections. It can be used in API and semi-premium connections.
- It can be used to replace the heavy metal API dopes (traditionally leaded).
- It may also be used for applications where good anti-seizure properties are required such as drilling in non-severe conditions (water,...).
- If an anti-corrosion product is demanded, TIFORA PG can be proposed as an alternative, and is particularly suited when in a environment exposed to salt spray, such as on offshore, marine and dockyard equipment (open gears,...).
- Always avoid contamination of the grease by dust and/or dirt when applying. Please observe recommendations API RP 5C1 for handling and running.

SPECIFICATIONS

- Approved by: VALLOUREC and MANNESMANN tubes (TSLI 441), SUMITOMO.
- Réferenced TOTAL EP : ref GS EP FP 330.

ADVANTAGES

**Heavy metal free
Prevent metal thread
seizures**

Antirust properties

Cost reduction

- Corrective coefficient of friction: 1 (similar to an API thread compound).
- Long term protection with enhanced anti-corrosive properties.
- Environmentally safe.
- Storage stability even in hostile environments, (pipe yards, barges, etc...).
- Clean and safe handling.
- Easy application (by brush) and removal (solvent, degreaser) within a wide range of temperature.
- Cost saving considering its light density (0,910) and subsequently lower consumption.
- Safe and easy use for both rig staff and repair shop staff.
- Grease without heavy metals (Zn, Cu, Pb) and powdered graphite.
- Maintains its original consistency without drying out.



TOTAL

TYPICAL CHARACTERISTICS	METHODS	UNITS	TIFORA PG
Soap/thickener		-	Al complex
NLGI grade	ASTM D 217/DIN 51 818	-	1.5
Color	Visual	-	Brown
Appearance	Visual	-	Smooth
Operating temperature range		°C	- 30 + 145
Penetration at 25°C	ASTM D 217/DIN51 818	0.1 mm	280 - 310
Four ball weld load	ASTM D 2596	kgf	620
Anti-rust performance SKF- EMCOR	DIN 51 802/IP220/NFT 60-135/ISO 11007	rating	0 - 0
Dropping point	IP 396/NF T 60102C	°C	> 225
Salt fog test	VALLOUREC	hours	> 1000

Above characteristics are mean values given as an information.

TOTAL LUBRIFIANTS
Industrie & Spécialités
30-10-2007 (supersedes 22-11-2006)
TIFORA PG
2/2



This lubricant used as recommended and for the application for which it has been designed does not present any particular risk.
A material safety data sheet conforming to the regulations in use in the E.C. can be obtained from your local commercial adviser or down loaded from www.quick-fds.com.