

## LUBRIFICANTE MULTIUSO AD ALTA POTENZA

Lubrificante multiuso ad alte prestazioni che lubrifica, penetra e protegge dalla corrosione fino a tre volte di più rispetto a un prodotto convenzionale. Il risultato è ottenuto grazie alla sua formula unica e altamente concentrata con additivi EP (pressione estrema).

Questi additivi EP sono componenti chimici all'avanguardia che formano pellicole protettive inorganiche le quali aderiscono alla superficie e impediscono il contatto tra i metalli, riducendo così graffi, grippaggi, saldature e usura grave, anche in condizioni di carico elevato, al limite o di pressione estrema.

### CARATTERISTICHE

- Eccellente potere lubrificante che garantisce prestazioni eccezionali in tutte le condizioni operative.
- Nonostante la sua natura oleosa, ha un'elevata capacità di penetrazione e dissoluzione della ruggine
- Funziona in modo eccellente come inibitore di corrosione e protettore di superfici.
- Altamente resistente agli ambienti corrosivi, all'acqua salata e agli acidi.
- Consente il riscaldamento dei meccanismi dopo l'applicazione per un efficace allentamento.
- Adatto all'uso in vari settori quali quello industriale, marittimo, agricolo, automobilistico, ecc.
- Non corrode i metalli ferrosi o non ferrosi, la plastica o la gomma.
- Senza silicone.

### APPLICAZIONI

- Adatto per sbloccare parti bloccate come filettature, viti, dadi, bulloni, alberi, ecc.
- Eccellente agente distaccante per prevenire o risolvere il grippaggio in acciai come l'acciaio inossidabile.
- Adatto per l'assemblaggio di componenti meccanici.
- Offre buone prestazioni come rivestimento protettivo per metalli conservati all'interno o all'esterno.
- Può essere utilizzato come lubrificante nella maggior parte delle applicazioni.
- Compatibile con metalli ferrosi e non ferrosi, plastica e gomma.
- Privo di silicone, quindi non causa problemi di compatibilità con le vernici.



**Formato Prodotto** 100ml

**Confezione del prodotto** Pet Plastica

**Unità scatola:** 12 pz.

**Riferimento:** : LUBRI07CT12



## PROVA DI RESISTENZA

### TEST RESISTANCE METHODOLOGY



ASTM D 2783 is the standard test method for measuring the extreme-pressure properties of lubricating grease using the Four-Ball Method. This test involves a four-ball apparatus to assess the ability of lubricants to withstand extreme pressure conditions.

The procedure for ASTM D 2783 involves placing three stationary balls in a triangular configuration within a container filled with the lubricating grease being tested. Under constant load, speed, and initial temperature conditions, a fourth ball positioned above the stationary ones rotates for ten seconds. Following this period, an examination is conducted to determine if welding has occurred between the balls. If welding is observed, the load applied during the test represents the welding load of the grease. If no welding is detected, the test is repeated with a higher initial load.

It's important to note that the higher the welding load, the better the extreme pressure properties of the grease, as per the described method. All balls used in the test are made of 100Cr6 steel with a diameter of 12.7mm.

#### TEST CONDITIONS:

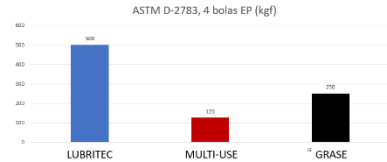
Temperature:  $27 \pm 8^\circ\text{C}$   
Speed:  $1760 \pm 40$  rpm  
Time:  $10 \pm 0.2$  s



### TEST RESISTANCE RESULTS



| Welding load 4 balls | Result (kgf) |
|----------------------|--------------|
| LUBRITEC             | 500          |
| Multi-Use Product    | 126          |
| Lithium grease       | 250          |



## PROVA DI CORROSIONE

### CORROSION TEST METHODOLOGY

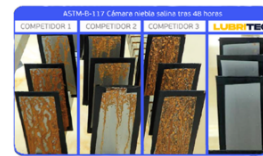


The test was conducted in accordance with the S/UNE-EN ISO 9227:2017 standard, and the following conditions were maintained without interruption, with the only pause being the minimum time required for periodic inspections:

#### Test Conditions:

Sodium chloride used corresponds to lot No. 20407106.  
Chamber temperature:  $35^\circ\text{C}$ .  
Humidifier temperature:  $47.5^\circ\text{C}$ .  
Humidifier pressure: 1 Bar.  
Saline solution: 5% sodium chloride + 95% demineralized  $\text{H}_2\text{O}$ .  
Salt mist recovery rate: 1.2 - 1.6 ml/h.  
pH of the recovered salt mist at  $25^\circ\text{C}$ : 7.  
Chloride concentration of the recovered salt spray: Acceptable (51.8 - 52.8 g/l).  
Relative density of the recovered salt spray:  $1.032 \text{ g/cm}^3$  measured at  $20^\circ\text{C}$ .  
Electrical conductivity at  $25 \pm 2^\circ\text{C}$  of the demineralized  $\text{H}_2\text{O}$  used in the salt solution: 2.1 - 2.6  $\mu\text{S/cm}$ .  
These test conditions were maintained continuously, with the only interruption being the minimum necessary time for conducting periodic inspections.

### CORROSION TEST RESULTS

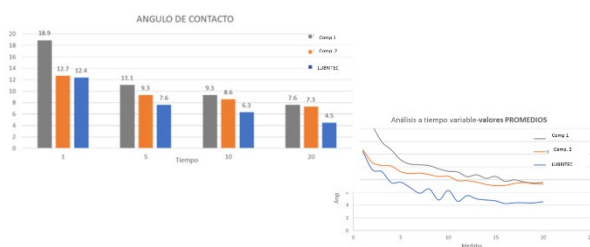


| PRODUCT  | 1H        | 2H        | 3H        | 4H        | 5H        | 24H       | 48H       |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| COMPET 1 | Unaltered | Unaltered | Altered   | Altered   | Altered   | 5%        | 75%       |
| COMPET 2 | Unaltered | Unaltered | Unaltered | Unaltered | Unaltered | 5%        | 15%       |
| COMPET 3 | 15%       | 50%       | 95%       | 95%       | 95%       | 100%      | 100%      |
| LUBRITEC | Unaltered | Unaltered | Unaltered | Unaltered | Unaltered | Unaltered | Unaltered |

The figures indicate the percentage of the surface that has undergone corrosion

## PROVA DI PENETRAZIONE

### PENETRATION TEST RESULTS



### PENETRATION TEST METHODOLOGY

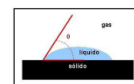


**Background:** The contact angle ( $\theta$ ) is a measure defined as the angle formed between the surface of a solid and the tangent line at the point where a liquid drop makes contact with the substrate surface. The numerical value of this angle is influenced by both the surface energy of the substrate and the surface tension of the liquid.

Contact angle measurements play a crucial role in assessing the hydrophilicity or hydrophobicity of a solid surface when it encounters a liquid.

#### Key Points:

A liquid is considered to wet the surface (hydrophilic) when the contact angle is less than  $90^\circ$ . This situation occurs only when the surface tension of the liquid is equal to or lower than the surface energy of the substrate. Conversely, a liquid is deemed non-wetting (hydrophobic) when the contact angle exceeds  $90^\circ$ , indicating that the surface tension of the liquid is greater than the surface energy of the substrate.



## ADDITIVI PER PRESSIONI ESTREME ILLUSTRAZIONE

