

TECHNICAL DATA SHEET

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CT 1240 EXTREME CONDITIONS GREASE

SPECIAL OXIDISATION- AND CORROSION-RESISTANT LUBRICANT

DEFINITION

CT 1240 is a chemically-advanced, fluorinated grease that resists chemical products and withstands difficult conditions.

ORAPI engineers have demonstrated their mastery of this advanced technology for more than 25 years. The chemical resistance and thermal stability of this grease brings on a new age in lubricant technology for maintenance-free constructions.

Indeed, working temperature is an important criterion in lubricating bearings; before the development of ORAPI CT 1240, extremely high temperatures necessitated mechanical solutions.

This grease fills a long-standing need amongst standard product lines since lithium + synthetic oil soap greases can lubricate for a maximum of 200 hours at 150°C only. But with CT 1240, lubrication lasts 1000 hours at 250°C for ball bearings under dynamic mechanical loads.

ADVANTAGES

CT 1240 possesses exceptional characteristics that provide solutions to multiple technical problems:

Extraordinary stability in regards to principle chemical products – organic solvents, in particular –, hydrocarbons, chlorinated products, and more.

Demonstrates excellent resistance to strong oxidising agents, including oxygen, peroxides, acids, strong bases, and helium.

Demonstrates excellent vacuum load up to 10-10 bars at 20°C.

Resists oscillations and vibrations well, preventing tribocorrosion.

Demonstrates incomparable resistance to high temperatures (320°C continuously) permitting its use in numerous sectors.

Effective from a thickness of 7 microns.

Demonstrates excellent resistance to water, vapour and salt spray.

CT 1240 is compatible with most polymers, such as butyl, chloroprene, and natural elastomers, etc.

1/3 Manufacturing site and registered office

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APPLICATION FIELDS

CT 1240 decreases the required frequency of lubrication to 6 to 18 months while offering optimal functional safety. CT 1240 has proved to be indispensable for the automobile industry and for household appliance manufacturers.

Lubricates bearing rollers and closed-circuit conveyors in high temperature environments for varnishing, curing and painting operations.

Lubricates trolley wheels of curing and drying ovens, and autoclaves.

Lubricates ventilation bearings (ovens, incubators).

Lubricates electrical motor mechanisms - Clients have reported that after 5,000 hours of operation, examination of grease is adequate.

Use in solvents and chemical products industries, plastics processing, ceramics, and refractory materials industries.

Lubricates all mechanisms subjected to very high temperatures, and oxidising chemical products (e.g., chlorates).

Bearings, rollers, valves and fittings, powdered metal bearings, and more.

Special grease for lubricating matching plastic runners, especially Duroplastics and thermoplastics such as polycarbonates, polystyrene, which tend to warp and crack when other commercially-available lubricants are applied.

During our own tests conducted for 100 hours at 80°C, our engineers observed no changes to volume or appearance of plastics materials tested.

| Cellulose acetate | CA |
|-------------------------|------|
| Polyoxymethylene | POM |
| Polyethylene | PE |
| Polycarbonate | PC |
| Polyurethane | PUR |
| Polystyrene | PS |
| Polytetrafluoroethylene | PTFE |

Note that the use of two similar plastics in a moving system is to prevent auto-adhesion.

CT 830 reduces wear of plastic materials to less than a tenth.

Tried and tested for cameras, projectors, general optics industry, precision mechanics and manufacturing of special devices.

Lubricate and re-lubricate bearing rollers, circuit rollers, wheel and chain bearings of conveyors, particularly in the food and textile industry.

Long-lasting or lifetime lubrication of bearings submitted to high temperatures, e.g., in electrical motors, ventilators, drying installations, cooking ovens, radiator grills, presses used in continuous manufacturing of fibreboard or laminated chip board.

Dry compressors. Piston pins equipped with needle roller bearings, where the temperature can rise to 120°C, or even a maximum of 200°C, due to compression, absolutely require CT 1240.

Specially-formulated for use in oxygen installations (Air Liquide authorisation available upon demand). Acceptable oxygen pressure is 345 bars, maximum.

High-performance, long-lasting grease for valves and fittings for hot and boiling water, vapours and other aggressive and corrosive agents. Ensures smooth, reliable and long-lasting operation and watertightness for valves, faucets, and plug and ball valves.

Lubricate electrical contacts. CT 1240 increases the working life of pins, push buttons, rotary switches, and potentiometers.

Lubricate O-rings.

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Manufacturing site and registered office

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TECHNICAL CHARACTERISTICS

| Colour Base | |
|--|-----------------------|
| Density at 20°C (DIN 51757) | |
| Drop point (NFT 60102) | |
| Grade NLGI (DIN 51 818) | 2 |
| Worked penetration (NFT 60132) | 265 - 295 |
| DN Factor | 300,000 |
| Oil separation at 200°C (AIR 1650 A) | 7.8% |
| Anti-rust performance (EMCOR) (NFT 60-135) | 1/1 |
| Viscosity of base oil at 40°C | approximately 420 cSt |
| 4-balls EP test (ASTM D 2596) | 800 kg |
| Operating temperature | |

Following the DIN ISO 2176 standard, the drop point of CT 1240-type lubricants cannot be determined since they do not melt. However, some oil separation may be observed from 160°C.

INSTRUCTIONS FOR USE

Because CT 1240 is incompatible with generally-used greases, it is important to carefully decrease the material before applying CT 1240.

Optimum performance of this technologically-advanced grease is obtained when friction points are clean. We recommend carefully cleaning with ORASOLV M1 and to dry any residue with compressed air in order to obtain perfectly dry surfaces.

Apply grease in a thin layer to the parts to be lubricated.

In bearings, do not fill more than 50% of the clearance.

In special cases where rotation speeds are low in bearings, circuit rollers for conveyors, and trolley wheels in cooking ovens, it is advised to fill the cavity completely.

PACKAGING

| 100 g tube | Ref. 3619 T3 | x 12 |
|--------------------------|--------------|------|
| 800 g cartridge (400 ml) | Ref. 3619 C5 | x 1 |
| 1 kg box | Ref. 3619 B7 | x 6 |
| 5 kg bucket | Ref. 3619 S1 | x 2 |

AUTHORISATION

- Food Industries FDA USDA H1
- Complies with NATO NNO 9150-14-539-9090, S 717 and MIL T 5542 D.
- Complies with AIRBUS PQ 81600.
- Authorised by Air Liquide for contact with oxygen IN BP 004 N° 4650.

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