Lubricating the Future
What are Beslux Fluor lubricants?

Beslux Fluor are lubricants formulated with synthetic Perfluoropolyether (PFPE) oils. They are able to work in a wide range of applications displaying outstanding performance in all three main aspects: lubrication, protection and durability.

We treasure two families in our Fluor range: Beslux Fluor Fluid oils and, G. Beslux Fluor lubricating greases. These outstanding greases are enhanced with special additives as well as, top end thickeners such as Polytetrafluoroethylene (PTFE), which is able to confer impressive physical and chemical properties as well as high lubricating power.

Beslux Fluor products belong to the highest performance and specification group of lubricants when, compared to the vast majority of lubricants used nowadays.

What are the advantages and properties they display?

From the chemical and physical point of view, they summon up all the needed requirements in order to be the best lubricant in the market.

- Excellent thermal resistance
- Very high chemical resistance
- Extremely low wear and oxidation levels
- Low evaporation properties
- High viscosity index
- Non-flammable.
- Pure oxygen resistance properties
- Strong acid and gas resistance
- High water resistance
- Wide working temperature range (-60°C to 300°C)
- Food grade
- Radiation and electrical transfer resistance
- Very high lubricating properties
- Non-soluble properties with all kind of fluids and solvents (except for fluorinated solvents)
- Very low friction coefficient
- Excellent elastomer and plastic compatibility
- High lubricating properties with all type of metals and tribological contacts: plastic-metal, plastic-plastic, metal-metal, etc.
Application of Beslux Fluor lubricants
Thanks to their physical and chemical properties, the amount of applications you can target with Beslux Fluor is practically infinite:

- Bearings in cardboard corrugator machines.
- General bearings, tunnel turbines, electric motors, etc.
- Between plastic components in the automotive industry, in order to improve friction or noise problems.
- For rubber or slide lubrication in vehicles, in order to smoothen while assembling components.
- Valve lubrication in aggressive general gas or pure oxygen environments.
- Chain, guides, or joint lubrications.
- Sintered bushing.
- Gearboxes.
- Vulcanized moulds.
- Vacuum pumps.
- Compressors.
- General mechanisms and bearings in the Pharmaceutical and Food industry.
- Mechanisms that require a semi-conductor lubricant with high resistance.
- Non flammable lubricant.
- O’ring lubrication.
- Mechanisms exposed to pure oxygen.
- Special industry valves/mechanisms/tools.
**Beslux Fluor in bearings of corrugated carton machines.**

The bearing lubrication in Cardboard corrugator machines is without any doubt one of the most representative applications of Beslux Fluor greases. These allow to reduce drastically the pollution due to excess of lubricant as, it is possible to only use a small quantity of grease resulting in, less break-down and machine stoppages. We are also able to increase the bearing life span in machines where these are submitted to harsh working conditions, high temperature, humid environments, continuous working, high-medium speeds, etc.

**Why Beslux Fluor is also the most appropriate for general bearings?**

Beslux Fluor lubricants are able to perform in the most unique and severe functioning conditions with all kind of bearings exposed to different speeds, loads, temperature, polluting substances, etc. By using Beslux Fluor you are offering the bearings the best lubricating solution possible and, as they are long life lubricants, they offer, significant reduction in re-greasing frequency and, in some mechanisms, they are able to resist the life span of the machine offering, a whole life lubrication.

**Beslux Fluor a real contribution for general lubrication.**

Beslux Fluor is an exclusive lubricant capable of resisting harsh working conditions, temperature up to 300ºC, presence of chemical agents, acids, reactive gases, etc. It possesses extremely low oxidation speed (low ageing) therefore, it is a passive lubricant of very high performance and displays very long life. It can be used in a broad scope of applications, many known and others yet to be discovered. The main goal is to remove all lubrication problems and increase as much as possible the life span of your mechanisms and equipment’s.
Compatibility of Belux Fluor with plastics and elastomers in general.

Beslux Fluor lubricants are empowered with extreme compatibility with all kind of plastics and elastomers, they do not trigger volume variations nor variations in their elastical, mechanical, nor long lasting properties.

In addition to their amazing compatibility, unlike Silicone products, our Beslux Fluor are adsorbed superficially to the plastic material in a very uniform and structured way, as a stable tacky transparent layer that, will not migrate into the plastic.

Beslux Fluor as an antinoise lubricant.

Tribological contacts between plastics, metals and rubbers, in all possible combinations, are in many occasions incompatible. When two of these surfaces slide on each other, noises are created.

In the automotive industry this phenomenon is a big problem, it reduces significantly the life span of mechanisms and parts in contact, as well as, creates an irritating and unpleasant noise.

Some antinoise applications of Beslux Fluor are:
- Sun visor
- Door compartments
- Connection systems/airbag
- Window fittings
- Ash trays
- Sunroofs
- Door guides/sealing
- Hinges
- Leather seats
- Control panels
- Power Windows/guides
- Suspension bushings
- Engine brackets
- Chassis damping rubbers

Beslux Fluor for lubrication of vehicle parts

The properties and traits of our Beslux Fluor lubricants make them ideal for the application of vehicle parts. Two main roles should be highlighted: the amazing performance and, the outstanding friction modifying properties are able to reduce significantly the contact noise and vibrations.

The presence of plastic components, the need of a life time lubrication, the silencing of noises, the need to lubricate in small gaps and spaces with small quantity of lubricant, the non-flammable properties, the high compatibility with all kind of materials and the excellent lubricating capacity of Belux Fluor, turn them out to be a total solution for vehicle parts and, the best choice for removing all type of noises.

Applications:
- Drive wires
- Engine O’rings
- Connecting hoses
- Competition CV joints
- Rear-view mirror drives
- Gas control valves
- Engine mechanisms in general
- Steering systems
- Brake systems
- Wheel bearing
- Steering wheel mechanisms, clutch
- General drive
Beslux Fluor in aggressive environments

Beslux Fluor lubricants have an excellent resistance to aggressive environments such as the ones found with: industrial gases, solvents or hydrocarbons. Good to use for all kind of bearings, valves, pumps or mechanisms in general. Beslux Fluor have excellent chemical resistance to reactive gases they therefore, do not dissolve, nor react, and therefore, keep their excellent properties.

Industrial activities where Beslux Fluor is used

In all type of industrial activities, these top lubricants can be used:

- Aeronautic industry
- Automotive industry
- Car part industry
- Bearing manufacturers
- Electric motors
- Fans
- Turbines
- Chemical industry
- Food industry
- Steel industry
- Electronic industry
- Metal industries
- Tyre manufacturers
- Nuclear plants

Beslux Fluor a non-flammable lubricant

There are some applications where mechanisms that pump or transfer fluids or, flammable substances (solvents, hydrocarbons, gases, etc.) exist and, therefore, in order to avoid fires or explosions, a non-flammable lubricant is required.

Is it important to be inert to pure oxygen?

Pure Oxygen is extremely flammable hence; all lubricants could trigger an explosion or a violent deflagration. The only tolerated lubricants are fluorinated ones, they are able to work with oxygen presence without causing a non-desired reaction. Nevertheless, in order to know the exact pressure and temperature limits in which fluorinated lubricants are able to work to, a BAM test is used.
How does Beslux Fluor increase the productivity?

- Extend the life span of the lubricated elements
- Huge decrease on re-greasing frequency.
- Less consumption of lubricants.
- Minimize costs of lubricant removal.
- Minimize stoppage of machinery due to breakdowns or re-greasing.
- Increase of productivity, from the maintenance and production point of view.
- Noise and vibration reduction.
- Energy savings.

**GREASES**

- G. BESLUX FLUOR FG 222
- G. BESLUX FLUOR FG 502
- G. BESLUX FLUOR FG 152
- G. BESLUX FLUOR H2, H 0, H1, H3, H2/3
- G. BESLUX FLUOR L 2
- G. BESLUX FLUOR HT 2, HT1
- G. BESLUX FLUOR LT 2 ATOX
- G. BESLUX FLUOR RACING XR4 2

**OILS**

- BESLUX FLUOR FLUID 03
- BESLUX FLUOR FLUID 04
- BESLUX FLUOR FLUID 05
- BESLUX FLUOR FLUID 06
- BESLUX FLUOR FLUID 07
Which are the advantages of having our own BRUGAROLAS’ fluorinated product range?

In this case, BRUGAROLAS S.A, who is a specialist in design, innovation and manufacturing special lubricants, makes use of all its research and manufacturing experience to develop the new top-end fluorinated Beslux Fluor lubricants.

BRUGAROLAS S.A treasures more than 135 years of experience solving tribological problems in all kinds of industries and, now, with the new fluorinated family Beslux Fluor we give the total solution to the most complicated existing lubricating problems.

BRUGAROLAS S.A.
Camino de la Riera, 36-44
08191 RUBI (Barcelona) SPAIN
(Polígono Cova Solera)
Tel. +34 935 883 100
Fax. +34 935 883 101
e-mail: comercial@brugarolas.com
http://www.brugarolas.com