Carbafle

At work in industry...

As conventional and speciality lubricants approach their limitations, the unique capabilities of *Carbaflo*[®] allows engineers to redesign for the future. Its durability and capacity to exceed operational constraints has led to *Carbaflo*[®] playing an integral part in technological advances throughout many different industries.

CHEMICAL INDUSTRY

Carbaflo® offers extensive options, including use in bearings, pumps, valves, gearboxes and chains exposed to high temperatures, contaminants and aggressive chemicals such as oxygen and chlorine. In addition, Carbaflo® can be used as a lubricant in clean room and hazardous areas, as vacuum pump greases and fluids, sealing barrier fluids and in many other severe environments.

AEROSPACE

Carbaflo® products endure the extremes of temperature & satisfy lubrication requirements found throughout the Aerospace Industry. Typical application areas are valves and 'o' rings in oxygen service, fuel systems, actuation & control systems, instrumentation fluids & critical bearing lubrication.

PACKAGING INDUSTRY

In plastic and paper packaging, *Carbaflo®* products can be used in drying cylinder, corrugator roll and calendar roll bearings exposed to high loads and speeds, abrasives, high temperatures and water vapour.

TEXTILE INDUSTRY

Suitable for pins, bearings, chains, rotary couplings, valves and mechanisms exposed to aggressive chemicals, abrasives, contaminants, high speeds and loads, high temperatures and humidity.



FOOD INDUSTRY

For oven bearings, fans, conveyors, chains, trolley wheels exposed to temperature extremes and high humidity.



AUTOMOTIVE INDUSTRY

prevents squeaks and offers many component lubrication options. including use on interior trim, facia, consoles, seats, sunroofs, sealing systems and glass run channels. Also useable in sealed-for-life bearings, electrical, fuel, steering and braking systems. In vehicle production, the products can be employed in paint oven conveyors and many other critical applications.

STEEL MANUFACTURING

Carbaflo® lubricants are used extensively on exit roller tables, straightening machine bearings, annealing cart wheel bearings, rotary nozzle valves and furnace rollers exposed to high temperatures, speeds and loads.

OFFSHORE, MARINE and MINING INDUSTRIES

Employed in valves, oxygen equipment, down-hole tools, shafts, safety mechanisms, clutches and calipers. These applications are often exposed to hydrocarbons, aggressive chemicals, brine, high loads, oxygen and extremes of temperature.

ELECTRICAL/ELECTRONICS

Lubrication of electric motor bearings, disc drives, switches, relays and electrical contacts along with high vacuum applications, sealants and vacuum pump fluids.

GENERAL INDUSTRY

Carbaflo® materials can be used throughout a diverse range of industries as a lubricant, coating, sealant or additive.



THE FUCHS LUBRITECH RANGE OF PRODUCTS:

BETONEX ■ BITEEREX ■ CEPLATTYN ■ CHEMPLEX ■ DECORDYN

FERROFORM ■ GEARMASTER ■ GERALYN ■ GLASOL ■ gleitmo

GRASINOL ■ HYKOGEEN ■ KOLLIGEEN ■ KOMPRANOL ■ LAGERMEISTER

LOCOLUB ■ LUBRODAL ■ METABLANC ■ NOPERLYN ■ ONTROPEEN

SILENTAN ■ SOK ■ STABYL ■ STABYLAN ■ TRAMLUB ■ TRAM-SILENCE

URETHYN ■ WAGRAS

Also available from FUCHS LUBRITECH (UK) Ltd are:

GERALYN ■ LUBESERV ■ MOLY-PAUL ■ CHAINLIFE ■ ROPELIFE PRIMALIFE ■ PBC

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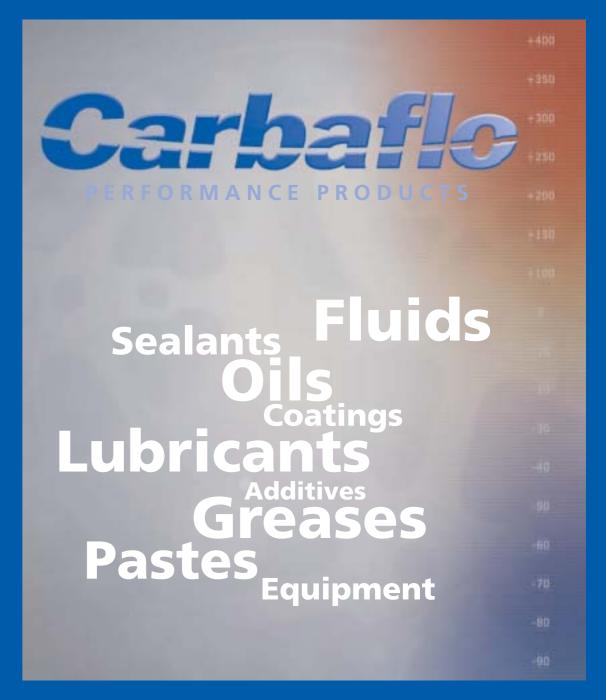
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Increased...
Performance & Productivity





carbafa

Unrivalled performance in extreme conditions

The **Carbaflo**® range of performance lubricants and materials have been developed using the most advanced fluoropolymer technology. Available as fluorinated fluids, oils, greases pastes and low friction coatings, they possess a unique combination of properties. The range is designed for critical applications, replacing conventional lubricants in the most hostile environments and temperature extremes.

...much more than a lubricant!

Carbaflo® materials are also used in areas not traditionally associated with lubrication, where their chemical resistance and thermal stability, combined with many other physical properties, ensure that they perform exceptionally well.

Outstanding lubrication and staying power... *Carbaflo*® endures

- Carbaflo® lubricants and coatings have a low friction co-efficient, excellent wear prevention and high film strength.
- Carbaflo® materials contain no silicone and are non-migratory.
- Most Carbaflo® products have an extremely low evaporation rate, even at elevated temperatures. Their low vapour pressure allows use in high vacuum applications.

Carbaflo[®]... Putting safety and the environment first

- Carbaflo® products are non-toxic and biologically inert.
- Their inert nature, and the relatively small quantities required in most applications, helps to ensure that Carbaflo® reduces the burden on the environment that lubricant waste often creates.

From -90°C to +400°C... *Carbaflo*® excels

- Extreme high temperature stability means some Carbaflo® products are suitable for continuous use up to 350°C, and intermittent use up to 400°C+.*
- Unlike conventional lubricants, when exposed to high temperatures Carbaflo[®] will not carbonise or form gummy deposits.
- Carbaflo® products are equally suitable for temperatures down to -90°C and below.*



- Inert to most chemicals used in industry, many Carbaflo[®] products are approved for use with oxygen and other aggressive chemicals.
- Carbaflo® will not react with rubber and plastic components or other engineering materials.
- Carbaflo[®] will not emulsify in water or dissolve in fuels or common solvents.
- The products are non-flammable and will not support combustion in any form.*

(*dependent upon Carbaflo® grade)

...serving global business, locally

The Carbaflo® range forms part of a diverse portfolio of FUCHS LUBRITECH specialist lubricants. Manufactured at our London-based 'Centre of Excellence', Carbaflo® products are used extensively throughout the world. Our Performance Products division prides itself on offering an holistic approach which includes materials, equipment and technical support to meet individual customer requirements.

Carbaflo® chemistry

Advanced Fluoropolymer technology in action

All Fluoropolymers exhibit similar properties due to their chemical composition. Most are chemically inert, resistant to extremes of temperature and have a low friction co-efficient. Fluorochemicals are particularly noted for their exceptional resistance to other chemical agents and environments that attack and degrade conventional materials.

Fluoropolymers are available in several forms, each developed for specific applications. Some are more prominent as a result of their extensive use in everyday life, while others are more specialised.

PTFE (Polytetrafluoroethylene)

Available in several forms and is used in a diverse range of applications, from non-stick frying pans, textile coatings, additives for inks, polishes, polymers and paints to high performance lubrication.

PFPEs (Perfluoropolyethers)

Odourless, colourless fluids chemically similar to PTFE, they are often referred to as liquid PTFE. Their unique properties are derived from their fluorinated structure and have extremely low friction, volatility and toxicity. The fluorine is also responsible for providing thermal and chemical stability, making these liquid fluoropolymers ideal for use in hostile and critical environments.





