

# Food Grade Lubricants

Industry leading products, backed up by service and support.





**GBR Technology** represent a number of leading brands of manufacturers of food grade lubricants carrying NSF registrations. We supply lubricants, greases, oils and aerosols carrying NSF H1 registrations.

Our range encompasses PetroCanada, Anderol® and Krytox™, for which we are authorised distributors in the UK and Ireland.

These three leading manufacturers have very strong brands in their respective areas covering white oils, polyalpha olefins (PAOs), esters and perfluorinated polyethers (PFPEs).

Most products are also certified to Halal and Kosher requirements.

#### **Not just a Lubricant Supplier**

GBR Technology are uniquely positioned in the UK for access to food grade lubricants. However, availability of product needs to be backed up with service to be of maximum value to customers – that's why we employ a technical sales team across the UK and hold stock in our warehouses in Berkshire. We are here to support your needs and have direct technical back-up from the manufacturers. Colour coded jugs can also be supplied and we can assist with product rationalisation to help keep stores in a manageable condition and not over-stocked

with unnecessary materials. We have conducted site audits along with follow-up recommendation reports that customers are free to implement at their discretion. We can also undertake technical recommendations with regard to specifying greases. The benefits from our free technical support and product improvement recommendations can be quite significant but we always aim to respect the wishes and requirements of each customer with regard to the level of technical support.

#### **Premium Lubricants**

Cost will always remain at the heart of many operations and it is becoming increasingly recognised that high quality lubricants will in most cases deliver cost savings through their longer life, better protection of your equipment assets, lower maintenance costs, reduced downtime and less waste disposal. The difference can be dramatic – a doubling of service life on a product 50% more expensive immediately shows oil costs savings and reduction in maintenance costs, reduced oil disposal and potential downtime add further time and cost savings. In the long term better equipment protection and reliability can make very much larger savings through extended asset life and higher productivity. In many cases however, users still persist with lower quality lubricants with a low cost per litre that degrade in machines and give inferior protection and tarnishing on surfaces. It is possible that some of this decision making could be down to confusion over the mixed messages and marketing claims that come from competing products and this is an area where we can assist with a scientific explanation of base oil types.



## Technical and Service Support:

At times, especially for bearing applications, specification of the correct lubricants to meet size, speed, load and temperature requirements is important and at GBR Technology we have expertise in this area. We do frequently discover applications where the base oil viscosity of the grease is not correct for the application in question and can offer advice. On occasion we will also support applications with oil analysis testing – this may be done by the manufacturer or an external lab such as ALcontrol.

Supply chain reliability and back-up on product stewardship issues are also vital to customers and again you can be confident with the brands we present here and our position as authorised distributor, that you will get reliability and the support you need.

## Performance of Food Grade Lubricants

Food grade lubricants have been considered in the past to be inferior in their performance compared to non-food grade lubricants due to the restricted number of additives that can be employed. However, when using premium base oils the need for additives is much reduced and the additive response in many cases is enhanced. The range of products presented here offer exceptional performance – there is no longer any need to expect compromised protection.



## The brands



Anderol® is a global producer and marketer of speciality greases and lubricants with a strong focus on air and gas displacement and H1 food production lubricants. The brand is one of the most respected in the lubricants world, and your assurance of performance and quality.

No longer must anyone settle for poor performance and lower productivity in order to comply with governmental safety and environmental regulations. Food processors can now effectively achieve HACCP (Hazard Analysis and Critical Control Point) food safety goals with ANDEROL® Food Grade Synthetic and White Oil-based Lubricants. Their FDA compliant lubricants not only outperform other food grade lubricants, they actually perform better in several critical areas than many widely used conventional lubricants.

In fact, ANDEROL® Food Grade Lubricants can be used in the most severe, heavy-duty applications throughout your entire manufacturing operation. In the process, they'll also save you time and money.

H1 food grade lubricant applications maximize equipment performance and minimize wear, without contaminating equipment or products.



Choosing the right lubricant for your equipment just got a lot easier with H1 certified Krytox™ food grade oils and greases from Chemours.

As with the full line of Krytox™ lubricants, Krytox™ oils and greases deliver superior performance with advanced features of high-temperature stability, non-flammability, and chemical and biological inertness. Krytox™ lubricants will not carbonize or form gummy deposits that typically cause failures, nor will they evaporate. Therefore, maintenance costs can be significantly reduced. The composition of Krytox™ lubricants allows them to function in a wide range of operating temperatures and chemical environments. Krytox™ lubricants will not break down under mechanical stress. The oils are clear, colourless, and odourless, and the grease is white. Krytox™ lubricants comply fully with USDA performance standards for designated uses. These lubricant products are not intended to be used as direct food additives. Use Krytox™ oils and greases whenever a long-lasting, tenacious, chemically inert lubricant is needed for your demanding applications.



As the Number 1 global producer of food grade white oil, PetroCanada's Purity range is well established globally in the food industry. The brand has been growing rapidly in the UK over the last 10 years due to exceptional product quality and service levels to back it up. PetroCanada are a highly reliable, attentive and innovative partner and are a joy to work with. Logistically, Europe is very well serviced with a hub warehouse in Rotterdam servicing distributor warehouses in many European countries including the UK. PetroCanada also offer an industry leading no-nonsense warranty.





# Products

## Hydraulic Fluids

Product	Base Fluid	Viscosity	Notes	Applications
Purity FG AW 32 - 100	White Oil	ISO32, 46, 68 & 100	Advanced anti-wear food grade hydraulic fluid	Long lasting protection in hydraulic systems including to pressures above 1000psi
Anderol <sup>®</sup> FGH 15-100	PAO	ISO 15, 22, 32, 46, 68 & 100	Synthetic high performance fluids	Recommended for use in hydraulic systems in food processing machinery. Also recommended for chains, vanes, canning and bottling machinery. Nominal operating range -35/-40°C to 170°C

## Compressor Fluids

Product	Base Fluid	Viscosity	Notes	Applications
Purity FG Compressor Fluid	White Oil + SynFX™	ISO 32, 46, 68 & 100	Syn Fx™ additive delivers synthetic-like performance	Advanced compressor fluid recommended for use in rotary screw compressors for up to 4000 hours at maximum air discharge temperatures of 85°C
Anderol <sup>®</sup> C-NRT FGC 32-150 synthetic	Synthetic	ISO 32, 46, 68, 100 & 150	HI food grade inert compressor lubricant	Cylinder and crankcase lubrication for centrifugal and screw compressors for the following gases: Air, butadiene, carbon monoxide, fumace (crack) gas, carbon dioxide (dry) ethylene, helium, hydrogen, fluoride gases, hydrogen sulphide (dry), natural gas, methane, nitrogen, propane, synthesis gas, sulphur hexafluoride, bio gas
Anderol <sup>®</sup> FG XL 32-150	PAO	ISO 32, 46, 68, 100 & 150	HI high performance food grade compressor lubricant	Improved detergency performance. Recommended for use in rotary-screw compressors, other rotating equipment applications and vacuum. Nominal operating range is -35/-40°C to 170°C Performance time 8000 to 10000 hours for fixed compressors, up to 12000 hours with lubricant analysis monitoring
Anderol <sup>®</sup> RCF-P 68FG-100FG	PAO	ISO 68 & 100	HI High performance food grade compressor lubricant – especially designed for ammonia refrigeration applications	Recommended for use in rotary-screw compressors and other rotating equipment applications. Nominal operating range is -35/-40°C to 170°C. The product was especially designed to be used in ammonia refrigeration applications



## Vacuum Pumps

Product	Base Fluid	Viscosity	Notes	Applications
Anderol <sup>®</sup> C-NRT Plus 32 FG & 100 FG	Synthetic	ISO 32 & 100	HI inert vacuum lubricant	Designed to lubricate vacuum pumps in combination with reactive gases

## Gear Lubrication

Product	Base Fluid	Viscosity	Notes	Applications
Purity FG EP Gear Fluid 100 - 460	White Oil SynFX™	ISO 100, 150, 220, 320 & 460	Advanced additive technology designed to deliver synthetic-like performance.	For use on enclosed gear drives (worm, helical, bevel and spur) operating under normal or heavy shock-loading conditions in food processing machinery
Anderol <sup>®</sup> 6150 - 6680	PAO	ISO 150, 220, 320, 460 & 680	HI high performance food grade gear lubricant	Gear sets excluding worm gears, circulating oil systems, chains, bearings
Anderol <sup>®</sup> C-NRT FG Gear 220/ 460	Synthetic	220 & 460	HI food grade inert gear lubricant	Gear sets excluding worm gears, circulating oil systems, chains, bearings
Anderol <sup>®</sup> 7150 FG – 7460 FG	PAG	ISO 150, 220, 320 & 460	HI high performance food grade gear and chain lubricant	Worm gears, chains and ways, including high water containing applications. Can also be used in low speed gearsets, bearings and circulation systems

# Products



## Chain Oils

Product	Base Fluid	Viscosity	Notes	Applications
Purity FG Chain Fluid – Light and Heavy grades	White Oil	Light: 151 cSt @ 40°C Heavy: 370 cSt @ 40°C	Excellent tackiness, resists water wash-off. Provides protection against wear and rust	Drive and conveyor chains. May be applied by brush or drip feed as well as centralised lubrication systems
Anderol® Chain Oil XL 220 FG	Ester	ISO 220	HI high temperature synthetic food grade chain oil	Tunnel ovens and spiral ovens. Can also be used in: Conveyor systems, printing and coating operations, wood forming machinery such as that used in the oriented strand board or plywood industry, other applications requiring a high temperature bearing, cam or slide lubricant, baking/oven chains
Anderol® 7150 FG – 7460 FG	PAG	ISO 150, 220, 320 & 460	HI high performance food grade gear and chain lubricant	Worm gears, chains and ways, including high water containing applications. Can also be used in low speed gearsets, bearings and circulation systems

## Greases

Product	Base Fluid	Viscosity	Notes	Applications
Purity FG00/1/2	White Oil	182cSt @ 40°C	NLGI grades 00, 1 and 2 aluminium complex greases	Use in a wide range of machinery including sleeve and anti-friction bearings, slides and guides
Purity FG2 Clear	White Oil	185cSt @ 40°C	NLGI grade 2 aluminium complex grease	Specially formulated for beverage production equipment – canning and bottling
Purity FG2 Extreme	Semi-synthetic	469cSt @ 40°C	NLGI grade 2 aluminium complex grease	For low to medium speed, heavily load bearings. Excellent protection at high temperature, pressure and load whilst operating continuously – such as animal pellet mills and continuous rotary cookers. Best suited for speeds under 1000 rpm
Anderol® FGCS-2 Plus	PAO	50cSt @ 40°C	Synthetic food grade calcium sulphonate complex grease	Superior mechanical stability, particularly in the presence of heat and water. Excellent rust prevention properties. Long life performance
Anderol® FGCS-2 HD	PAO	400cSt @ 40°C	Synthetic heavy duty food grade calcium sulphonate complex grease	Low to medium speed bearings operating under harsh conditions e.g. water, heat, extreme load
Anderol® 783-00/0/1/2	PAO	350cSt @ 40°C	Synthetic food grade aluminium complex grease	Roller and friction bearings in food and beverage, cosmetic and pharma applications





# Products

## Sprays

Product	Base Fluid	Viscosity	Notes	Applications
Purity FG Spray	White Oil	151 cSt @ 40°C	Multi-purpose food grade spray with tackifiers to reduce drips and fling off. Valve works upside down	Chains, rails, guides, slides, pivots, cables linkages, gears, hinges and small bearings
Purity FG Penetrating Oil Spray	White Oil	39 cSt @ 40°C	Multi-purpose penetrating oil	Help loosen rust and scale around fasteners
Purity FG Silicone Spray	Silicone	N/A	Silicone based lubricant that forms a non-hardening film to resist moisture and help prevent corrosion around heavy water wash-up areas	Good for metal to non-metal contact applications
Anderol® 783-00 Spray	PAO	350 cSt @ 40°C	Synthetic food grade aluminium complex grease	Semi fluid grease applications
Anderol® 6220	PAO	ISO 220	H1 High performance food grade gear lubricant	Synthetic oil spray for various general purpose applications
Anderol® FG Si 3	Silicone	3000 cSt @ 40°C	H1 food grade silicone grease	Lubrication of valves and taps. Especially designed to lubricate and seal upper ball joints of taps

## Other Applications

Product	Base Fluid	Viscosity	Notes	Applications
Purity FG WO White Mineral Oil 10 - 90	White Oil	10, 15, 35, 40, 68 and 90 cSt at 40°C grades available	Ultrapure white mineral oils with H1 and 3H registrations blended with vitamin E as a stabiliser	Registered for use as a release agent. Equipment wipe down and dust control. Direct and indirect food contact in production, packaging and processing operations
Purity FG Heat Transfer Oil	White Oil	37 cSt @ 40°C	High thermal stability oil. Suitable for liquid phase applications up to 326°C bulk temperature. NSF HT-I registered	Cooking facilities, drying, edible oil deodourising and heating of deep frying oils. Also used in equipment for manufacture of plastic bottles, films and containers for food packaging
Purity FG Seamer-E Fluid	White Oil	155 cSt @ 40°C	Water emulsifying fluid	High speed continuous lubrication seaming units where contamination of the oil with water and sugar may occur
Purity FG Trolley Fluid 46	White oil	ISO 46	Low viscosity with additives to provide outstanding resistance to wear and corrosion and protect against oil drips	Lubricating hook and trolley systems in meat processing operations. As a rust protection oil. As a low viscosity lubricant for chains and
Anderol® DDO	Vegetable oil	35 cSt @ 40°C	3H food grade dough divider oil	Lubricant for dough dividers, protective coatings for food stuffs, dust control agent, release agent, forming and rolling of aluminium foil, meat hooks and butcher equipment

## Other Applications cont.

Product	Base Fluid	Viscosity	Notes	Applications
Anderol® Seamer Oil 130	White Oil	129 cSt @ 40°C	N/A	Designed for high speed continuous lubrication seaming units: main turrets, bearings, chains, gears
Sugar Dissolving Oil	-	-	Easy to rinse off, does not become rancid over time, high temperature resistant	Prevents sugar build up when applied, dissolves sugar and fondant.
All 5	PAO	5.5 cSt @ 40°C	High performance air line lubricant	Recommended for use in all sorts of pneumatic tools and as a flushing fluid; conveyor line components, controls, all air actuated components

## Krytox™ - PFPEs

This class of product is based on fully fluorinated oils and greases with exceptional chemical resistance and heat stability. Materials can withstand continuous high temperatures to 300°C (and some grades to spikes of 400°C) without any degradation – high temperature stability to a level way in excess of other synthetics. Krytox™ provides exceptional performance, reliability and extended use capability.

Typical applications include bearings in ovens and food packaging manufacture, valves, O-rings, chains, compressors, gear boxes and vacuum pumps.

Krytox™ lubricants are extremely resistant to water and steam washout – they are colourless (oils) or white (greases) and odourless.

Category	Product	Base Oil Viscosity	Application	Comments
Lubricating Oil	Krytox™ GPL 105	ISO 150	Chains, compressors, bearings, gear boxes	General purpose PFPE oil
	Krytox™ XHT 500	500cSt @ 40°C		High viscosity oil and further increased temperature range
	Krytox™ XP 1A5	ISO 150		Contains anti-corrosion additive
Multipurpose Greases	Krytox™ GPL 202	ISO 15	Bearings, valves, seals and O-rings	Use up to 320°C Additive free
	Krytox™ GPL 203	ISO 32		
	Krytox™ GPL 205	ISO 150		
	Krytox™ GPL 206	ISO 220		
Anti-corrosion Greases	Krytox™ GPL 223	ISO 32	Bearings, valves, seals and O-rings	Contains anti-corrosion additive
	Krytox™ GPL 225	ISO 150		
	Krytox™ GPL 226	ISO 220		
Extra-high Temperature Greases	Krytox™ XHT-SX	738cSt @ 40°C	Bearings and chains	Use up to 320°C Additive free
	Krytox™ XHT-AC	500 cSt @ 40°C		Use up to 320°C contain anti-corrosion additive
	Krytox™ XHT-ACX	738 cSt @ 40°C		
Vacuum Pump Fluids	Krytox™ VPF 1506	16cSt @ 50°C	Mechanical pumps	Non-additised chemically resistant oils
	Krytox™ VPF 1514	32cSt @ 50°C		
	Krytox™ VPG 1525	52cSt @ 50°C		

## **GBR Technology Limited**

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