CPI Fluid Engineering

Lubricants for Food Grade Applications





Lubricants for the Food Industry

Lubricants are necessary to run your food and beverage production facility. You need the right lubricants to keep your facility running efficiently and with minimal downtime. CPI, an established leader in lubricants for the food industry, offers a complete range of lubricants and greases to meet all your plant needs.

CPI offers NSF H1 registered lubricants for "above the line" applications where there is the possibility of incidental food contact. In addition, CPI also offers products registered ISO 21469. For applications where there is no possibility of contact with food, CPI offers a range of NSF H2 registered lubricants, or "below the line" lubricants.

Proven Performance throughout the Life of the Product

Our lubricants are extensively tested in our laboratories and have field-proven performance. Many food manufacturing plants around the world have used CPI lubricants with confidence in their daily operations. To ensure continued performance, CPI offers in-house oil condition monitoring with 48-hour turnaround from receipt of sample. Our experienced technicians analyze your results and compare them to your fluid's used oil specification and previous samples. Since CPI manufactures the lubricants, we know exactly how to interpret the results and identify potential issues with the fluid or system.

Engineered to Offer Many Features & Benefits

CPI's lubricants are manufactured to the highest standard and offer many benefits in operation, including:

- · High viscosity index
- Low pour points
- Good demulsibility
- Excellent wear & rust protection
- · Good compatibility with elastomers

All of CPI's high performance lubricants are designed to increase equipment reliability, reduce downtime and improve throughput to ultimately improve your plant's efficiency.





Certified Products to Meet Special Demands

CPI aims to provide a comprehensive series of food grade (FG) products that adhere to recognized health & safety regulations. In addition to maintaining NSF H1 & H2 registrations for our FG lubricants, we have also successfully registered ISO 21469 products. CPI has also taken steps to ensure many of our products meet the specifications of several religious or cultural groups. Our kosher & halal certifications allow us to better serve our broad global customer base to meet each important product need.



ISO 21469

Expanding upon the requirements needed for H1 registrations, the ISO 21469 standard addresses the entire lubricant manufacturing process - not just the lubricant itself. In short, ISO 21469 evaluates lubricants in terms of:

- Formulations and label review to ensure ingredient safety and label accuracy
- Risk assessment to ensure the manufacturer has identified and evaluated relevant hazards in the lubricant's manufacture and use
- Production facility audits to confirm adherence to quality procedures and good manufacturing practices
- Analytical testing to verify integrity of product composition

The process evaluates all aspects of the lubricant manufacturing cycle. It accounts for the lubricant and its ingredients, as well as the manufacturing process, handling, packaging and storage. CPI believes in maintaining the highest standards for the health & safety aspects of our products. Offering products registered ISO 2469 adds another layer of confidence for our customers, and peace of mind for food & beverage consumers.



Kosher

Members of the Jewish community of faith require the food and drink they consume to be Kosher, or "fit for use." This process requires not only the food or drink be Kosher, but the entire process used to make the consumables must be deemed kosher as well. To meet these guidelines, the equipment and all of the oils, lubricants & fluids used in the process must be certified by a governing authority – in most cases by a rabbi. CPI offers food grade lubricants that have been certified Kosher/Pareve for use in food processing operations.



In similar fashion, members of the Muslim community of faith adhere to food & drink requirements according to Islamic Law. Food must be deemed Halal, or "permissible," before it can be consumed. The Halal guidelines also cover the entire process used to process/produce the food – which includes the machines, oils & lubricants involved. Certification is required in order to supply our lubricants to customers in food processing industries. Many of CPI's food grade lubricants are certified Halal by IFANCA (Islamic Food and Nutrition Council of America).



Lubricants for Compressors

Product	Viscosity Grades	Application	NSF Registered	Base Oil	Description/Recommended Application
CPI®-1008	32-100	Refrigeration	H2	нтмо	Refrigeration compressor lubricants with patented seal swell technology recommended for ammonia compressors with evaporator temperatures greater than -39°C.
CPI®-1009	32-100	Refrigeration	H2	нтмо	Refrigeration compressor lubricants recommended for ammonia compressors with evaporator temperatures greater than -39°C.
CPI®-1080-F	100-150	Air	H1	White Oil	Air compressor lubricants designed for high pressure reciprocating compressor applications.
CPI®-4260-F	46	Air	H1	PAO/Ester	Long life air compressor lubricants designed for use in rotary screw compressors.
CPI®-4265-F	46-68	Air	H1	PAO/Ester	Superior long life air compressor lubricant designed for use in rotary screw air compressors.
CPI®-4600-F	15-150, 460	Air	H1	PAO	Air compressor lubricants designed for use in rotary screw, rotary vane and reciprocating compressors.
CPI®-4608-F	68-220	Air	H1	PAO	Air compressor lubricants designed for oil free rotary screw, reciprocating and rotary vane compressors. These lubricants may also be used in positive displacement blowers.
CPI®-4624-F	46-150	CO2	H1	PAO	Compressor lubricants optimized for use in CO ₂ applications. These fluids are recommended for flooded rotary screw and rotary vane compressors.

Lubricants for Oil Free Compressors

Product	Viscosity Grades	Application	NSF Registered	Base Oil	Description/Recommended Application
CPI®-4608-F	32-68	Oil Free	H1	PAO	Air compressor lubricants designed for oil free rotary screw, reciprocating and rotary vane compressors.
CPI®-4617-F	68-150	Oil Free	H1	PAO	Gear oils optimized for use in low load, high speed industrial gearing systems, such as integrally gear driven compressors (oil free compressors).
CPI®-FMO	15-68	Oil Free	H1	White Oil	Designed with an anti-wear & extreme pressure (EP) additive package, these fluids are recommended for integrally gear driven compressors (oil free compressors).
CPI®-FMO-PD	68, 150	Oil Free Screw	H1	White Oil	Designed with the FMO additive package and enhanced with pour point depressant, these lubricants are recommended for integrally gear driven compressors and bull gear applications.

Lubricants for Hydraulics and Gears

Product	Viscosity Grades	Application	NSF Registered	Base Oil	Description/Recommended Application
CPI®-FMO	15-460	Hydraulic, Gear	H1	White Oil	Designed with an anti-wear & extreme pressure (EP) additive package, these fluids are recommended for hydraulic pumps, integrally gear driven compressors and gear applications.
CPI®-FMO-PD	68, 150	Hydraulic, Gear	H1	White Oil	Designed with the FMO additive package and enhanced with pour point depressant, these lubricants are recommended for hydraulic pumps, integrally gear driven compressors and bull gear applications.
CPI®-4608-F	32-68	Hydraulic	H1	PAO	These lubricants are designed for hydraulic and light gear applications.
CPI®-4608-F	68-220	Gear	H1	PAO	These lubricants are designed for gear applications.
CPI®-4617-F	68-680	Gear	H1	PAO	Gear oils optimized for use in low load, high speed industrial gearing systems such as integrally gear driven compressors.

Lubricants for Chains and Barrier Fluids

Product	Viscosity Grades	Application	NSF Registered	Base Oil	Description/Recommended Application
CPI®-4614-F	5, 32, 68	Barrier Fluid	H1	PAO	Synthetic lubricants recommended for use as sealing/barrier fluids for chemical processing pumps and compressors.
CPI®-1078-F	68, 150	Chain Oil	H1	White Oil	Chain oils designed to adhere to metal surfaces & prevent throwing off or dripping. Recommended for use in textile, beverage and food processing industries.
CPI®-4617-F	68-680	Chain Oil	H1	PAO	Synthetic lubricants for chain oil applications.
CPI®-4678-F	32, 68, 150, 460	Chain Oil	H1	PAO	Chain oils designed to adhere to metal surfaces & prevent throwing off or dripping. Recommended for use in textile, beverage and food processing industries.

Greases

Product	Viscosity Grades	Application	NSF Registered	Base Oil	Description/Recommended Application
CPI®-GRS-460-F	N/A	Grease	H1	PAO	A calcium sulfonate thickened multi-purpose grease recommended for food processing applications.
CPI®-GRS-900-F	N/A	Grease	H1	PAO	An aluminum complex thickened multi- purpose grease recommended for lubricating the sleeve and anti-friction bearings, slides, guides and couplings on food processing machinery.

Who is CPI?

CPI Fluid Engineering is a division of The Lubrizol Corporation. The Lubrizol Corporation, a

Berkshire Hathaway company, is an innovative specialty chemical company that produces and supplies technologies to customers in the global transportation, industrial and consumer markets.

CPI Fluid Engineering is a world leader in synthetic lubricants for compressors and specialty industrial applications. Our formulation and technical application expertise, combined with our flexibility and responsiveness, enhance the quality and value of our customers products. CPI delivers fluid performance, technology support and customer service to meet customer needs.

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