

Research centre

The Eni Research Centre in San Donato Milanese has state-of-the-art laboratories featuring advanced equipment for studying, developing and fully identifying the characteristics of raw materials for high performance lubricants. In line with the company's marketing strategies, the Eni research involves performing important technical activities in collaboration with important machinery manufacturers, regulatory authorities and several prestigious Italian universities. The Eni Research Centre complies with the UNI EN ISO 9001 standard in relation to the activities of "Applied research, technical support and laboratory analyses in the energy sector: lubricants, additives, bitumens, special products for motor vehicles and for industrial use" and "Production on pilot systems of lubricants, propellants and fuels" (sector EA 34,35 - certificate no. 676).

Quality

The long time established Eni Refining & Marketing Quality Management System obtained the updated UNI EN ISO 9001:2015 certification about commercial and industrial processes covering the whole lubricant and additives industrial cycle and including project design, process development, supplying activities, production operation, blending, packaging and client delivery.



Our commitment to ensure customer satisfaction

The Eni Refining & Marketing organization is able to support customers for any need regarding lubrication oils and to consolidate a confidential relationship based on integrated technical support services.



Sales assistance

The Eni sales network, present on the territory, provides information on the range of lubricating oils and assists customers in all the product procurement phases.



Technical assistance

Eni technicians are available to help solving any operative issue and can provide their assistance to arrange lubrication guides, to follow the oil charge monitoring and to offer training courses regarding lubrication.

Laboratory assistance

The Eni laboratories give their full assistance to customers for the oil charge control by periodic monitoring in order to guarantee the best operating efficiency of lubricated machineries.



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Eni lubricants for the food industry



oilproducts.eni.com



Lubricants oils

Products	Туре	Viscosity ISO VG	Applications Advantages			International Specifications	
Hydraulic an	d pneumatic system	ns oils					
	Pharmaceutical white oil	15 22 32 46 68 100	- Hydraulic systems. - Pneumatic systems. - Small gearboxes.		- High viscosity index. - High anticorrosion, antiwear, antioxidant pro	perties.	NSF H1 Kosher - Halal
SX E	Synthetic oil	32 46 68 100	 Hydraulic systems. Applications at low and high temperated of the system o	ure.	 High viscosity index. Excellent cold behaviour and excellent therr oxidation stability. High anticorrosion, antiwear, antioxidant pro 		NSF H1 Kosher - Halal
Compressor oils							
	Synthetic oil	46 68 100	- Air compressors. - Vacuum pumps (ISO VG 100).		 Wide operating temperature range. High viscosity index. Excellent resistance to oxidation. High antifoam performance. High thermal stability. Excellent anticorrosion and antiwear properties. 	perties.	NSF H1 Kosher - Halal
Gear oils							
	Synthetic oil + Pharmaceutical white oil	150 220 320 460 680	 Gears. Plain and rolling bearings. Slideways and conveyor belts. 		 Excellent antiwear and EP properties. Excellent anticorrosion and antioxidant pr Good cold behaviour. 	operties.	NSF H1 Kosher - Halal
	Synthetic oil	150 220 320 460	- Gears. - Plain and rolling bearings. - Slideways and conveyor belts.		 Wide operating temperature range. Excellent antiwear and EP properties. Excellent anticorrosion and antioxidant prop Outstanding cold behaviour. 	perties.	NSF H1 Kosher - Halal
Chain oils							
	Synthetic oil	150 220 320	 Chains and conveyor belts. Slideways. Plain and rolling bearings. 		 High penetration capacity and adhesivity. Wide operating temperature range (-25/+18 Low tendency to leave residues at high temperature and antioxidan High anticorrosion, antiwear and antioxidan 	perature.	NSF H1 Kosher - Halal
	Synthetic oil	320	 Chains and conveyor belts. Slideways. Plain and rolling bearings. 		 High penetration capacity and adhesivity. Recommended for use at extreme temperat Low tendency to leave residues at high temp High anticorrosion, antiwear and antioxidan 	perature.	NSF H1 Kosher - Halal
White oils			- Release agents for grills and oven dish	es for bakeru			
White Oil	Pharmaceutical white oil	22 70	products, cakes and pasta. - Plasticizer. - Bearings and components operating in with food. - Soluble oil for rust protection of knives cutting fruit and vegetables, suspended and conveyor belts.	n direct contact	 Uses in direct contact with food. Transparent, odorless, colorless. Outstanding thermal-oxidative stability. Excellent antirust properties. 		NSF H1 NSF 3H NSF H3 FDA 21CFR 172.878 FDA 21CFR 178.3620(a) Kosher - Halal
Lubricants	aerosol						
						Range	International
Products	Туре		Applications		Advantages	of use	Specifications
	Multipurpose synthetic lubricant		ons, chains, slideways, conveyor belts, rs and bearings.	 High long-term Good antiwear High oxidation 		-50/+180°C (after solvent evaporation)	NSF H1
Rust remover	Dismantling and anticorrosion synthetic lubricant	 Loosens extremely rusty screws and nuts. Rust removing. Long-term corrosion protection. 		 Deep penetration through rust. Resistant to humidity and condensation. Excellent anticorrosion and antiwear properties. 		-50/+180°C (after solvent evaporation)	NSF H1
Silicone fluid	Silicone Iubricant	and comp range of te	ons, chains, slideways, seals onents operating in a wide emperatures. gent and protective agent s surfaces.	 Extreme compa Water and stear Good resistance 	temperature range. tibility with plastic materials. n repellent. to chemical products. n against oxidation and corrosion.	-50/+200°C	NSF H1
High Performance Grease Performance Crease Performance Crease Performance Crease	Multipurpose EP synthetic grease	 Slideways, chains, conveyor belts, hinges, small gears and bearings, also loaded, operating in a wide range of temperatures, in wet environments and in the presence of water or steam. 		 High penetration ability, non-hardening and non-stick. Excellent resistance to wear and loads. Excellent adhesivity. High protection against corrosion and resistance to water washout and steam. Excellent thermal and mechanical stability at low and high temperatures. 45/+180°C (peaks 200°C (after solvent evaporation)) NSF H1	
Universal Lavanda eui	Fast solvent-based lubricant		of dirt, oil residues, grease and sludge ces tools and machinery.) through dirt, grease and sludge. ly, dries quickly without leaving residues	-30/+40°C	NSF H1

Eni is a major integrated energy company committed to growth in the activities of finding, producing, transporting, transforming and marketing oil and gas.

Eni is an integrated company that operates across the entire energy chain, employing more than 33,000 people in 73 Countries around the world. Our way of doing business, based on operating excellence, focus on health, safety and the environment, is committed to preventing and mitigating operational risks.

Eni Refining&Marketing has always been committed to researching and producing ultra-high performance lubricants and operates in the industrial market in Italy, Europe and various other Countries.

The Eni lubricant lines for industry are able to meet all the lubrication needs of industrial plants of any type with a quality level to the top of the market.

Eni places scientific research and technological innovation at the core of its sustainable growth strategies.

Eni Refining&Marketing maintains and reinforces its technical and commercial leadership status in the fields of technology, quality, environmental protection and technical support for its customers.

Eni lubricants for the food industry

Eni has developed a "food grade" line of lubricants capable of meeting the production requirements of the food, pharmaceutical, cosmetics and animal feed industries.

Using Eni "food grade" lubricants enables the customer to:

• minimise the risk of food contamination in all the various production phases, as required by the procedures of the HACCP protocol (Hazard Analysis Critical Control Point),

- meet the lubrication requirements of all machines used in the production processes,
- ensure high product quality standards,
- maximise productivity.

The lubricants of the Eni "food grade" line are only formulated with raw materials from FDA Group 21 CFR 178.3570* and are approved and registered by the NSF** as H1, i.e. "Authorized where the lubricant may incidentally come into contact with food".

The NSF mark is the guarantee that the product has been approved by one of the best independent certification organisations respected and recognised by consumers, producers and regulation agencies worldwide.



The lubricants of the Eni "food grade" line are produced in a plant certified in accordance with the ISO 21469 standard. The indicants of the Eni rood grade line are produced in a plant certified in accordance with the ISO 21469 standard. This international standard defines the hygiene requisites required for the formulation, production, use and handling of H1 lubricants that may accidentally come into contact with products and packaging used in the food, pharmaceutical, cosmetics and animal feed industries.

The lubricants of the Eni "food grade" line:

Do not contain the main allergens: derivatives from the dairy industry, peanut oil, soy and derivatives.

Do not contain genetically modified ingredients.

🔊 Do not contain animal derivates.

Re "Kosher" certified as products that comply with Jewish law.

 ${\rm Im}$ Are "Halal" certified as products that comply with Islamic law.

* The F.D.A (Food and Drug Administration) is a US Government organisation that regulates food and pharmaceutical products and aims to protect the health of citizens by implementing regulations that control the introduction of the products under its jurisdiction to the market.

** The N.S.F (National Sanitation Foundation) is a US organisation established in 1944, which verifies and registers the lubricants that are suitable for use in food industries



Lubricants greases

Products	Type - Thickener	NLGI grade	Applications	Advantages	Range of use	International Specifications
Rubus	Pharmaceutical white oil - Aluminium complex	000 00 1 2	 Plain and rolling bearings. Loaded bearings of conveyor belts. Chains, joints, gaskets and seals. Gears and gearboxes. 	 Excellent sliding properties. Good resistance to loads. Good water washout reisistance. High anticorrosion and antioxidant properties. 	-15/+120°C	NSF H1 Kosher - Halal
	Synthetic oil - Aluminium complex	000 00 1 2	 Multipurpose EP greases for all types of bearings. Loaded bearings of conveyor belts. Gears, gearboxes, slideways, joints, gaskets, seals and chains. 	 Excellent performance and stability at high and low temperature. Excellent resistance to loads. Good water washout resistance. High anticorrosion and antioxidant properties. Very good pumpability at low temperature. 	-40/+140°C	NSF H1 Kosher - Halal
	Pharmaceutical white oil norganic	00 2	 Conveyor belts, components and bearings not loaded of bakery industry, olive mills, of bottling industry and wine-making companies. 	 Transparency and absence of colour and odour. Excellent adhesivity. Insoluble in water. Good thermal stability. 	-25/+100°C (NLGI 00) -20/+120°C (NLGI 2)	NSF H1 Kosher - Halal
	Pharmaceutical white oil - Inorganic	2	 Release agent for grills and oven dishes for bakery products, cakes and pasta. Lubrication of knives and cutting boards for fruit, vegetables and meat. Bearings and components operating in direct contact with the food. Suspended chains and conveyor belts. 	 Transparency and absence of colour and odour. Excellent adhesivity. Insoluble in water. 	-20/+120°C	NSF 3H Kosher - Halal
	F.D.A silicone oil - Inorganic	3	 Taps, valves, fittings in plastic materials and rubber. Insulating grease. O-rings, domestic taps, expansion valves exposed to high or low temperature. Electrical cables and wires. Pumps for potable water. 	 High stability and resistance to high temperature. Insoluble in water and steam. Excellent resistance to chemical agents. Compatible with elastomers, rubbers and plastic materials. Very good protection against oxidation, and corrosion. 	-50/+220°C	NSF H1 Kosher – Halal
	PFPE PTFE	2	 Bearings, gears, slideways and chains operating at very high temperatures also with high loads. Components operating in aggressive environments. Rubber and plastic materials. 	 Excellent stability at high temperature. Excellent resistance to loads. High resistance to water washout and steam. Chemically inert and resistant to strong acids and bases, halogens, alkaline baths, solvents and aggressive agents. Compatible with elastomers, rubbers and plastics. Good anti-corrosion properties. 	-35/+250°C (peaks 270°C)	NSF H1 Kosher - Halal
	Pharmaceutical white oil - Calcium complex	1,5	 Bearings, open gears and components loaded and subjected to vibrations, and shocks. Chains and components operating in aqueous or semi-immersed environments. 	 Very good adhesivity. High resistance to loads, vibrations and shocks. High thermal and mechanical stability. Excellent resistance to water washout. High protection against corrosion. 	-20/+140°C (peaks 150°C)	NSF H1 Kosher - Halal
	Pharmaceutical white oil - Calcium sulphonate complex	2	 Bearings, open gears and components loaded and subjected to vibrations, and shocks. Chains and components operating in aqueous or semi-immersed environments. Fan bearings and electric motors. 	 Excellent resistance to loads, vibrations and shocks. High thermal and mechanical stability. Excellent adhesivity, water washout resistance and protection against corrosion. 	-25/+140°C (peaks 180°C)	NSF H1 Kosher – Halal

Antifreeze

Products	Туре	Applications	Advantages	International Specifications
Antifreeze Foodgrade	Propylene glycol	 Cooling circuits in food processing plants (beer, fruit juices, etc.). Heat transfer fluid in solar plants for sanitary hot water. 	 Free from amines, nitrites and phosphates. Outstanding antioxidant and anti-foam properties. Excellent protection against rust and corrosion of all metals particularly steel, copper and aluminum. Compatible with rubbers and plastics. 	US FDA 21 CFR 184 Subpart B CUNA NC 956-18 (ed. '04) Halal

For further information on applications and features of products see Eni technical and safety data sheets.