# Lubricants for Food and Related Industries

# **GERALYN®**



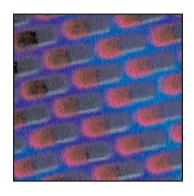


















FUCHS LUBRITECH is a unit of the globe-spanning FUCHS group of companies. As the largest independent manufacturer of lubricants in the world, the FUCHS organization successfully serves a vast array of industrial processes, each having its own particular set of operating conditions and challenges. This unsurpassed combination of wide-ranging expertise and extensive technical resources can be drawn upon to turn out targeted solutions for any kind of lubrication problem. In this brochure, we focus on just one of the speciality product groups created by FUCHS, the GERALYN® brand of food grade lubricants.

# LUBRICANTS FOR FOOD AND RELATED INDUSTRIES

The GERALYN® line is a selection of machinery lubricants conforming to the US FDA regulations for use in food processing equipment where there may be incidental contact with a food or edible product. They are all **food grade lubricants** as defined by CFR 21, Section 178.3570.

Food grade lubricants (also referred to as H-1 grade) are usually mandated for applications where the edible product is exposed to the lubricated part. Non-food grade lubricants are generally permitted in other areas of the plant where contact is not expected.\*

# GERALYN® COMBINES PURITY AND STRENGTH.

GERALYN® products combine both the **edible purity of H-1 grade** with the **performance of heavy-duty industrial lubricants.** This provides safety-conscious plant managers with the best of both worlds. GERALYN® can be used throughout the plant without risk of inadvertant exposure, while not compromising productivity, performance or protection of equipment.

GERALYN® is recommended for proper lubrication of a wide variety of machinery used in production, processing or packaging of:

Bakery: bread, buns, sweet goods
Meat, Poultry, Seafood
Beverages: beer, soft drinks, juices
Preserved fruits and vegetables
Dairy: milk, cheese, ice cream
Snacks: nuts, candy
Cereal: grain and seed oil
Proprietary and generic drugs
Vitamins and nutritional supplements
Containers: glass, plastic, fiber tubes,
drums, metal cans and tins



<sup>\*</sup> Ask your Fuchs sales representative about our broad range of lubricants for both conventional and specialized applications in these industries.

# **Food Grade Oils**

#### **GERALYN® RO Series**

General purpose machine oil with high quality rust and oxidation inhibitors for long-term service. Use for bearings, slides, chains; circulating systems; tablet punches; beverage filler stirrups and lifters; heat transfer fluids; release agent for molds and baking pans.

	ISO	Vis cSt @	Vis cSt @	Viscosity	Flash	Fire	Pour
Product	Grade	40° C	100°C	Index	Point	Point	Point
GERALYN® RO 15	15	15.66	3.43	88	380°F	390°F	-33°C
GERALYN® RO 22	22	20.86	4.56	109	385°F	400°F	-30°C
GERALYN® RO 32	32	30.48	5.38	111	380°F	405°F	-21°C
GERALYN® RO 46	46	49.09	7.21	106	420°F	435°F	-18°C
GERALYN® RO 68	68	70.69	8.85	97	480°F	510°F	-15°C
GERALYN® RO 100	100	106.10	11.18	89	510°F	530°F	-21°C
GERALYN® RO 220	220	223.20	22.00	114	515°F	555°F	-18°C
GERALYN® RO 460	460	470.11	36.20	115	500°F	540°F	-15°C

#### **GERALYN® AW Series**

Premium machine oil formulation with additive treatment for anti-wear service, oxidation resistance, anti-foam, excellent-water separation and rust prevention. Uses: high pressure hydraulic fluid; circulating oil for gears, bearings, levers and cams; vacuum pumps, compressors and blowers; roller chains, slides, conveyor mechanisms.

Product	ISO Grade	Vis cSt @ 40° C	Vis cSt @ 100°C	Viscosity Index	Flash Point	Fire Point	Pour Point
GERALYN® AW 15	15	15.41	3.36	81	360°F	390°F	-39°C
GERALYN® AW 22	22	21.76	4.60	130	375°F	400°F	-27°C
GERALYN® AW 32	32	33.73	5.90	119	445°F	475°F	-18°C
GERALYN® AW 46	46	47.82	7.10	106	420°F	440°F	-18°C
GERALYN® AW 68	68	65.18	8.88	110	420°F	445°F	-18°C
GERALYN® AW 100	100	101.60	11.60	102	490°F	550°F	-18°C
GERALYN® AW 220	220	229.10	23.00	124	440°F	470°F	-15°C
GERALYN® AW 460	460	461.80	30.90	97	510°F	565°F	-15°C

#### **GERALYN® SF Series**

Fully synthetic formulation on PAO base stock with high tech rust and oxidation inhibitors and fortified with premium anti-wear additives. For high or low temperature extremes, oven chains or freezer conveyors; bearings, gearing, pumps or hydraulics; air compressors, vacuum pumps and blowers.

	ISO	Vis cSt @	Vis cSt @	Viscosity	Flash	Fire	Pour
Product	Grade	40° C	100°C	Index	Point	Point	Point
GERALYN® SF 32	32	34.44	6.06	123	470°F	520°F	<-55°C
GERALYN® SF 46	46	45.97	7.42	125	510°F	575°F	-55°C
GERALYN® SF 68	68	68.73	10.50	140	510°F	580°F	<-56°C
GERALYN® SF 100	100	101.70	14.10	141	510°F	580°F	<-50°C
GERALYN® SF 150	150	158.70	19.00	136	535°F	595°F	-33°C
GERALYN® SF 220	220	206.80	24.00	144	515°F	590°F	-22°C
GERALYN® SF 320	320	342.20	35.70	150	540°F	620°F	-22°C
GERALYN® SF 460	460	439.60	43.00	151	520°F	615°F	-32°C
GERALYN® SF 680	680	677.60	63.80	165	555°F	630°F	-31°C

#### **GERALYN® EP Series**

High performance, semi-synthetic oils, fully formulated for extreme pressure and anti-wear service, oxidation resistance, anti-foam. Water separation and rust prevention. Use for enclosed gearboxes and speed reducers, including worm gear drives; heavy-duty chain links, slides and cams; highly loaded bearings.

	ISO	AGMA	Vis cSt @	Vis cSt @	Viscosity	Flash	Fire	Pour
Product	Grade	No.	40° C	100°C	Index	Point	Point	Point
GERALYN® EP 150	150	4	143.7	16.0	117	460°F	550°F	-15°C
GERALYN® EP 220	220	5	217.6	21.8	121	455°F	540°F	-18°C
GERALYN® EP 460	460	7	453.4	38.2	128	465°F	540°F	-15°C
GERALYN® EP 680	680	8	672.2	51.6	133	470°F	540°F	-15°C

# **Food Grade Greases**

#### **GERALYN® G-SW2**

A general purpose, high temperature, off-white grease formulated with an inorganic, non-melting thickener, synthetic PAO base fluid and tackifiers to enhance retention. Use for plain or anti-friction bearings; cam tracks, followers, slides; open gears; chucks and crimping devices. Not for Kosher use.

	NLGI	Worked	Vis cSt @	Vis cSt @	4 Ball	4 Ball
Thickener	Grade	Penetration	40° C	100°C	Wear	EP
Inorganic	2	265-295	411.00	41.00	.60	200

#### **GERALYN® G-C2**

Colorless, slightly opaque grease formulated with an inorganic, non-melting thickener and tackifiers to enhance retention. Use in general purpose applications that require non-melt and low bleed properties.

Thickener	NLGI	Worked	Vis cSt @	Vis cSt @	4 Ball	4 Ball
	Grade	Penetration	40° C	100°C	Wear	EP
Inorganic	2	265-295	102.3	12.00		160

#### **GERALYN® AX-C2 and AX-C1**

Clear, smooth and gel-like aluminum complex grease with excellent water resistance and wide operating temperature range. For general purpose use: ball and roller bearings; sleeves, cams, punches, slides; high speed bearings; cold processes; centralized grease systems.

Product	Thickener	NLGI Grade	Worked Penetration	Vis cSt @ 40° C	Vis cSt @ 100°C	4 Ball Wear	4 Ball EP
GERALYN® AX-C2	Aluminum Complex	2	265-295	100.00	11.20	.58	160
GERALYN® AX-C1	Aluminum Complex	1	310-340	100.00	11.20	.55	160

# **GERALYN® AX-W Series**

Heavy-duty, high temperature, off-white, aluminum complex grease, specially formulated to provide a food-grade lubricant with exceptional anti-wear and EP protection. Opaque, colorless and slightly tacky with excellent water resistance for long-term service in roller bearings, sleeves, cam tracks and slides. One food-grade grease for most plant applications.

Product	Thickener	NLGI Grade	Worked Penetration	Vis cSt @ 40° C	Vis cSt @ 100°C	4 Ball Wear	4 Ball EP
GERALYN® AX/W2	Aluminum Complex	2	265-295	176.80	17.50	.56	400
GERALYN® AX/W1	Aluminum Complex	1	310-340	176.80	17.50	.56	400
GERALYN® AX/W0	Aluminum Complex	0	355-385	176.80	17.50	.56	400

#### **GERALYN® FMG 387**

General purpose, calcium soap-based grease with exceptional tackiness, formulated with high quality rust protection and anti-wear additives. For heavy water conditions and exceptional washout resistance; bearings, sleeves, cam track slides; open gears and sprockets.

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		NLGI	Worked	Vis cSt @	Vis cSt @	4 Ball	4 Ball	
	Thickener	Grade	Penetration	40° C	100°C	Wear	EP	
	Anhyd. Calcium	2	265-295	68.87	8.95	.72	126	

# **Related Products**

#### **GERALYN® CHAIN OIL**

Medium-bodied lubricating oil formulated with high quality rust and oxidation inhibitors and adhesive enhancing additives to improve retention and reduce fling-off. Especially suited for humid or wet conditions; drive chains on mixers, blenders, bottle and can fillers, conveyors; bakery proofer chains.

#### **GERALYN® AIRLUBE AA**

Specialty oil engineered for use as airline lubricant; formulated with proprietary package of emulsifiers, detergent and dispersants. Use for air line lubricators; air motors and actuators; air tools; pneumatic vacuum systems; compressed air systems.

#### **GERALYN® KRYSTALL**

Penetrating and flushing oil with rust preventive and lubricating properties. Cleans and lubricates conveyor surfaces, processing tables and packaging mechanisms; flushing agent for bearings, gearboxes, hydraulic systems and reservoirs; release agent for cutting blades, shaping devices, punches and dies; protects parts against rust and corrosion.

#### **GERALYN® FOOD GRADE LUBRICANT SPRAY**

Synthetic, food-grade lubricating oil in a convenient trigger-spray bottle. Easy to use for highly effective lubrication of chains, slide and ways, punches and dies, conveyor surfaces, chutes and guides, or as a release agent for pans and molds.

# Value Added Services Offered

# **Shared Global Technology**

Expertise, shared technologies, resources and world-wide access to the international FUCHS group all converge to provide the food and related industries with innovative lubricants.

# **Toll Free Technical Support**

Call our technical department toll free at 800-800-4022 for answers to your questions by phone, or contact your FUCHS LUBRITECH sales representative.

#### Complete Plant Surveys and Lubricant Inventory Consolidation

Complete plant surveys by a lubricant professional are available to determine your exact lubricant requirements and identify opportunities to consolidate your lubricant inventory, saving you time and money.

# **CENT Oil Monitoring Service**

A state-of-the-art oil analysis program that incorporates modern test instrumentation and industry recognized and documented test methods. This sophisticated tool enhances your overall maintenance program and helps maximize equipment life and up-time.

#### **ISO 9001 Registered Company**

As an ISO 9001 registered company, FUCHS LUBRITECH is committed to consistently meeting high standards driven by continous process improvement and customer satisfaction.









# **Other Products From FUCHS Lubricants**

# **Bakery/Food Processing**

Oven Chain Lubes
Proofer Chain Lubes
Air Line Lubes
Chain Lubricants
Aerosols
Lube Oils and Greases

#### **Cleaners**

Alkaline Parts Cleaners for Spray or Immersion Solvent-based Parts Cleaners Maintenance Cleaners Super Concentrates Aerosols

# **General Maintenance Lubes**

Compressor Fluids
Air Line Lubes
Hydraulic and Gear Oils
Specialized Greases
High/Low Temp Lubes
Cleaners
Aerosols
Chain Oils

# **Glass Manufacturing**

Shear & Scoop Lubes Swabbing Compounds Blank Pre-Lubes IS Machine Oils Synthetic Lubes for the Hot End High Temp Lubes for Lehrs Aerosols

#### **Corrosion Preventives**

Solvent, Oil, and Water-Based Corrosion Preventives Water Displacing Fluids Fingerprint Neutralizing Fluids Coatings for Indoor and Outdoor Protection

# **Lubricating Oils**

Gear Oils
Chain Lubricants
Penetrating Oils
Wire Rope Lubricants
Compressor Oils
Aerosols

# **Pharmaceutical**

(FDA TITLE 21 CFR SECTION 178.3570)

Greases
General Lube Oils (Tablet
Punches, etc.)
Gear Oils
Chain Oils
Air Line Lubes
Cleaners

# Electrical/Electronic

Silicone Compounds & Greases Silicone Fluids Pastes Chain Oils Conductive Coatings Heat Sink Compounds Aerosols

# **Lubricating Greases**

High Temperature Greases Low Temeperature Greases Water-resistant Greases Gear and Central System Lubricants Aerosols



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