

Product Information



Lubricants for Food, Beverage & Pharmaceutical Industries

LE's H1 & H2 Products Provide Solutions for Specific Needs

Lubrication Engineers, Inc. manufactures a wide variety of high-performance oils and greases specially formulated to meet the needs of food, beverage and pharmaceutical operations. LE knows about the severe operating conditions and expensive machinery at these companies. That's why our H1 and H2 products include solutions for heat, cold, moisture, rust and oxidation (R&O), wear, foaming, staining, odor, frequent visual inspections and much more. The following lubricants comprise most of LE's business with food, beverage and pharmaceutical operations.

NSF H1 Lubricants

Cleared for Incidental Food Contact

Lubricants that are NSF H1 certified have been cleared for use in USDA-inspected food processing plants and can be used where incidental food contact may occur. Uses for an H1 lubricant include protective anti-rust film, release agent on gaskets or seals of tank closures, and lubricant for machine parts and equipment. The amount of lubricant used should be the smallest needed to accomplish the desired effect. All LE H1 lubricants are certified Halal by IFANCA, and – except for H1 Machine Oil (6751) – are also certified Kosher Pareve by the Orthodox Union.



USDA H2 Lubricants

Recommended for Nonfood Contact Areas

H2 lubricants meet USDA H2 criteria for nonfood contact areas of food processing plants. These are lubricant applications with no possibility of food contact and are usually below the production line. Most LE lubricants meet USDA H2 criteria. See pages 3 and 4 of this brochure for those USDA H2 lubricants used most frequently by LE's food and beverage customers.

NSF H1, Kosher Pareve, Halal



H1 Quinplex® White Oil (4010, 4020, 4030 & 4040)

ISO 46 to 150

Use for bearings, bushings, slides, guides, chains, compressors, valves, vacuum pumps and hydraulics where incidental food contact may occur.

- Provides anti-wear protection, including R&O resistance
- Will not foam
- Will not cause staining

H1 Quinplex Synthetic Food Grade Oil (4032 & 4046)

ISO 32 & 46

Use for bearings, bushings, chains, compressors, guides, hydraulics, slides, valves, and vacuum pumps where incidental food contact may occur; works great for rotary screw compressors.

- Provides anti-wear protection, including R&O resistance
- Exhibits superior low-temperature performance
- Has no adverse seal compatibility problems





NSF H1, Kosher Pareve, Halal (continued)



H1 Quinplex Penetrating Oil & Lubricant (4048)
Use in any area where a penetrating and lubricating oil suitable for incidental food contact is required, including bottling and canning equipment, slides, cams, chains and other machine surfaces.

- Provides anti-wear protection, including R&O resistance
- Quickly frees frozen parts and dissolves rust and residue
- Penetrates and leaves heavy film for lubrication and rust protection

H1 Quinplex Penetrating Oil & Lubricant (4059)
Aerosol
Use in any area where a penetrating and lubricating oil suitable for incidental food contact is required, including bottling and canning equipment, slides, cams, chains and other machine surfaces.

- Provides anti-wear protection, including R&O resistance
- Quickly frees frozen parts and dissolves rust and residue
- Penetrates and leaves heavy film for lubrication and rust protection

H1 Quinplex White Gear Lubricant (4090, 4140 & 4250)
ISO 220, 460 & 680
Use for equipment where incidental food contact may occur, including bearings, conveyor chains, gearboxes, guides, open gears, valves, and worm gear applications; works well for heavily loaded gear applications.

- Provides anti-wear protection, including R&O resistance
- Extremely pure, translucent and non-irritating; will not cause staining
- Will not foam

H1 White Utility Oil (4201 & 4204)
ISO 15 & 46
Use for general lubrication applications where incidental




food contact may occur; recommended for rust prevention after washdown.

- Made with USP grade mineral oil
- Contains no additives
- Will not cause staining

H1 Silicone Spray (804)
Aerosol
Use for general lubrication applications where incidental food contact may occur, such as slides, chutes, nylon chains and other packaging equipment.

- Exhibits low odor
- Will not cause staining

NSF H1, Halal

 **H1 Machine Oil (6751)**
SAE 40
Use for Manzel lubrication system of Angelus seamers.

- Provides anti-wear protection, including R&O resistance
- Resists foaming
- Contains ashless additive that completely emulsifies water with the oil
- This is LE's only H1 lubricant that is non-Kosher-Pareve.



NSF H1, Kosher Pareve, Halal



H1 Quinplex Food Machinery Lubricant (4025-4022)

NLGI 2, 1, 0 & 00; Aerosol version of 4025 available

Use for blenders, bottlers, conveyors, cookers, extractors, fillers, mixers, slicers, wrappers and other grease-lubricated machinery where incidental food contact may occur.

- Will not wash out, pound out or melt and run, even under severe conditions
- Provides EP protection
- Inhibits rust
- Will not cause staining
- White, heavy-duty, semi-synthetic and mechanically stable



Ovenworx™ H1 Syn Chain Lubricant (4061)

ISO 220

Use for high-temperature oven chains in industrial process and food processing ovens, including with automatic lube systems.

- Fully synthetic formula with high-viscosity base fluid
- Features oxidation stability and reduced volatility at high temps
- Has broad temperature range and high flash point
- Lubricates chains up to 300°C (572°F)
- Penetrates all moving parts, ensuring smooth operation
- Seals out moisture
- Contains no solid additives to fall out of suspension
- Can be applied to hot oven chains without interrupting operation
- Leaves no residue
- Low-staining, odor-neutral

USDA H2 Oven Chain Lubricants

Almasol® Oven Chain Lubricant (2710)

Use for bakery and tortilla oven chains and other chain applications where solid lubricants and cleanliness are required.

- Effectively lubricates up to 482°C (900°F)
- Resists high temperatures; withstands heat without oxidizing
- Penetrates completely into pins and bushings, leaving a protective film
- Ensures quiet, smooth operation
- Reduces friction and wear
- Resists corrosion
- Will not gum, char or build up hard deposits
- Biodegradable carrier fluid evaporates readily
- Long-lasting, low odor

Almasol Smokeless Chain Lubricant (2705)

Use for bakery and tortilla oven chains and other chain applications where cleanliness is required and a high flash point carrier is needed.

- Premium grade synthetic lubricant
- Resists high temperatures
- Will not smoke or cause flame-ups
- Reduces friction and wear
- Resists corrosion
- Long-lasting, odor-neutral





USDA H2 Oven Chain Lubricants (cont'd)

Almasol High Temperature Lubricant (2799)

Use for oven chain applications in which a low evaporation carrier is needed to allow the lubricant time to penetrate.

- Premium grade synthetic lubricant
- Resists high temps; withstands heat without oxidizing
- Effectively lubricates up to 482°C (900°F)
- Penetrates completely into pins and bushings, leaving a protective film
- Reduces friction and wear
- Will not gum, char or build up hard deposits
- Will smoke minimally when applied to extremely hot chains
- Reaches even hard-to-reach spots
- Self-cleaning, long-lasting, odor-neutral

Synolec® Lubricant (9963)

Use for spray or drip lubrication on chains and conveyors under high-temperature conditions. (Do not use where EP lubricant is required.)

- Pure synthetic oil dissipates at high temperatures without leaving any deposits
- Cleans up deposits left by petroleum residues
- Helps eliminate broken chains and downtime
- Greatly increases chain life
- Sprays easily in standard equipment
- Contains rust and oxidation inhibitor
- Has excellent thermal stability

Monolec® High Temperature Oven Chain Lubricant (9965)

Use for skate chains in bread and bun baking, kiln chain drives, Stenter/Tenter chains and other high-temp oven chains. Also works well with ovens' automatic lube systems.

- Premium grade synthetic lubricant
- At extremely high temps, it forms a soft residue that functions as a solid lubricant, but causes minimal buildup
- Acceptable for use when OEM specs prohibit solids
- High flash point minimizes safety concerns
- Excellent thermal stability and low volatility characteristics
- Smokes minimally when applied to extremely hot chains
- Reduces wear
- Reduces energy needs
- Long-lasting, odor-neutral

Other USDA H2 lubricants used frequently in food & beverage industry

Monolec R & O Compressor / Turbine Oil (6401-6407)

ISO 32, 46, 68, 100, 150, 220 & 320

Use for air compressors, oil circulating systems, enclosed gears and oiled bearings.

- Premium grade industrial oil
- Reduces wear and inhibits R&O
- Will not foam
- Excellent water separation
- Long-lasting, versatile

Multilec® Industrial Oil (6801-6807)

ISO 32, 46, 68, 100, 150, 220 & 320

Use for air compressors, industrial turbines, enclosed gears, hydraulics and oiled bearings.

- Reduces wear and inhibits R&O
- Excellent water separation

Duolec® Vari-Purpose Gear Lubricant (1601-1610)

ISO 46, 68, 100, 150, 220, 320, 460, 680, 1000 & 1500

Use for enclosed gears and any industrial gear or bearing application that requires a high thermal stability, EP lubricant.

- Adheres to metal during use
- Separates readily from water
- Will not foam
- Contains no solids

Syntemp® Synthetic Lubricant (9102)

Aerosol

Use for high-temperature chains, sprockets and slides that require an EP lubricant.

- Reduces wear, friction and heat
- Resists water, rust and oxidation
- Won't run or melt

Monolec Hydraulic Oil (6105, 6107, 6110, 6120 & 6520)

ISO 22, 32, 46, 68 & SAE 5W-20

Use for modern high-speed hydraulic pumps.

- Reduces wear
- Resists water, rust and oxidation
- Will not foam
- Long-lasting