Product Information

H1 Quinplex® Synthetic Food Grade Oil (4031, 4032, 4046, 4068)

Food Grade Lubricant Clings to Equipment, Providing Reliable Water-Resistant Protection from Oxidation, Rust & Wear

H1 Quinplex Synthetic Food Grade Oils (4031, 4032, 4046 and 4068, ISO 22, 32, 46 and 68, respectively) are NSF H1 registered, Kosher Pareve and Halal certified lubricants designed to use in food processing and other sensitive environments where superior anti-wear, rust- and oxidation-resistant properties are required. Featuring 100% synthetic base oil, H1 Quinplex 4031, 4032, 4046 and 4068 have excellent load-carrying abilities, can be used in low-temperature applications, and contain Quinplex®, LE's proprietary impact-resistant additive.



Beneficial Qualities

Food Grade

- Is a pure, nonstaining, odorless, tasteless, translucent and nonirritating lubricant
- Can be used with confidence where incidental food contact or staining can occur
- Registered NSF H1
- Certified Kosher Pareve
- Certified Halal by IFANCA

Superior Protection

- Provides margin of safety with superior anti-wear properties
- Outperforms many white oils that are unable to offer this protection because they do not include anti-wear additives
- Protects from rust and corrosion
- Provides superior protection, even in extremely low temperatures

Reliable Performance

- Extends equipment life and decreases downtime
  - o Crucial with high capital, continuous process equipment
  - o Downtime costs can be devastating when production must be delayed or cancelled
- Offers excellent load-carrying capability
- Is compatible with seals (including Nitrile and Viton)

Proprietary Additive

LE's proprietary additives are used exclusively in LE lubricants. H1 Quinplex Synthetic Food Grade Oil contains Quinplex.

Quinplex® impact-resistant additive contributes to outstanding water resistance, tackiness and enhanced mechanical stability, and helps to form a barrier against corrosion.

Technical Data

H1 Quinplex® Synthetic Food Grade Oil

	4031	4032	4046	4068
Color	Amber	Amber	Amber	Amber
ISO VG	22	32	46	68
Relative Density @ 60°F/60°F, ASTM D1298	0.825	0.831	0.835	0.839
Viscosity @ 100°C, cSt, ASTM D445	4.6	6.07	7.73	10.61
Viscosity @ 40°C, cSt, ASTM D445	22.0	32.08	46.23	69.58
Viscosity Index ASTM D2270	127	138	135	138
Flash Point °C (°F), (COC), ASTM D92	219 (426)	232 (450)	276 (530)	283 (541)
Pour Point °C (°F), ASTM D97	-78 (-108)	≤ -60 (≤ -76)	≤ -54 (≤ -65)	≤ -48 (≤ -54)
Rust Test 4 hrs @ 60°C, DI H_20, ASTM D665A	Pass	Pass	Pass	Pass
Copper Corrosion 3 hrs @ 100°C, ASTM D130	1b	1b	1b	1b
Oxidation by RPVOT @ 150°C, minutes, ASTM D2272	1,000	1,000	1,000	1,000
Four-Ball Wear @ 75°C, 1,200 rpm, 40 kgf, 60 minutes, mm wear, ASTM D4172	–	0.39	0.39	0.39
Emulsion Characteristics @ 54°C, oil-water-emulsion/minutes, ASTM D1401	40-40-0/5	40-40-0/5	40-40-0/5	40-40-0/5
Foaming Characteristics @ 24°C/93.5°C/24°C, 3 sequences, ml of foam/time to break, ASTM D892	0/0; 0/0; 0/0	0/0; 0/0; 0/0	0/0; 0/0; 0/0	0/0; 0/0; 0/0
Vickers Vane Pump Test total weight lost, mg, ASTM D2882	–	–	15.9	–

Performance Requirements Met or Exceeded

- NSF H1
- Halal (certified by IFANCA)
- Kosher Pareve
- Angelus Sanitary Can Machine

Typical Applications

- Bearings (roller bearings, linear bearings & other); bushings; chains; compressors, including rotary screw air compressors); hydraulics; slides & ways (slideways); and vacuum pumps used in:
  - o Animal feed preparation
  - o Aluminum/metallic foil and package manufacturing
  - o Food processing
  - o Paper-making machinery
  - o Textile machinery
- Extreme cold conditions such as blast freezers and cold rooms



Quinplex® is a registered trademark of Lubrication Engineers.

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LE operates under an ISO 9001 Certified Quality System.

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