



## H1 Quincal™ Syn FG Grease (4070-4072)

**Synthetic formula features calcium sulfonate complex thickener**

Formulated for use in food processing applications, H1 Quincal™ Syn FG Grease features a synthetic base fluid, calcium sulfonate complex thickener, and Quinplex, LE's proprietary impact-resistant additive. This premium combination imparts a very high dropping point, exceptional inherent extreme pressure (EP) characteristics, superior mechanical stability, low oil bleed, tackiness and water resistance – everything you need to protect and extend the life of your equipment.

NSF H1 registered for incidental food contact, this grease is the right solution for a wide variety of food processing applications. It is especially effective when used on bearings operating in a warm, moist environment or in operations where a lot of water is needed to keep equipment cool. H1 Quincal is robust enough to handle elevated temperatures and other harsh conditions found at food manufacturing plants, resulting in longer bearing life, fewer equipment repairs, less downtime and lower lubricant consumption.



### Beneficial Qualities

#### Food Grade

- Registered NSF H1 for incidental food contact
- Certified Kosher Pareve
- Certified Halal by IFANCA

#### High-Performance Formula

- Features synthetic base fluid
- Provides long-lasting reliable protection
- Performs effectively in severe conditions such as heat, water and heavy loads
- Ensures very low oil separation

#### Calcium Sulfonate Complex Thickener

- Inherently prevents rust and corrosion – even when exposed to brine

- Has very high dropping point as compared to conventional thickeners
- Ensures excellent mechanical stability for long-lasting use
- Imparts outstanding EP properties (without addition of heavy metals)

#### Wear, Water & Temp Resistant

- Protects against wear, metal-to-metal contact and scoring
- Resists oxidation and water contamination
- Clings to metal, will not sling off
- Stays in contact zone, even in high moisture environments
- Performs well in a broad temperature range, including moderately elevated temperatures
- Maintains consistency after repeated heating and cooling

#### Available Grades

- NLGI 2 (4072)
- NLGI 1 (4071)
- NLGI 0 (4070)

### Proprietary Additive

LE's proprietary additives are used exclusively in LE lubricants. H1 Quincal Syn FG Grease contains Quinplex.

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



## H1 Quinca™ Syn FG Grease

	<u>4072</u>	<u>4071</u>	<u>4070</u>
<b>Thickener Type</b>	Calcium Sulfonate	Calcium Sulfonate	Calcium Sulfonate
<b>Texture</b>	Smooth w/ Tack	Smooth w/ Tack	Smooth w/ Tack
<b>Color</b>	Beige	Beige	Beige
<b>NLGI Grade</b>	2	1	0
<b>Worked 60 Penetration ASTM D217</b>	280	325	370
<b>Worked 10K Penetration ASTM D217</b>	±3%	±3%	±3%
<b>Worked 100K Penetration ASTM D217</b>	±5%	±5%	±5%
<b>Dropping Point °C (°F), ASTM D2265</b>	>316 (>600)	>316 (>600)	>316 (>600)
<b>Base Fluid Characteristics</b>			
<b>Flash Point °C (°F), COC, ASTM D92</b>	252 (485)	252 (485)	252 (485)
<b>Viscosity @ 100°C, cSt, ASTM D445</b>	13.8	13.8	13.8
<b>Viscosity @ 40°C, cSt, ASTM D445</b>	100	100	100
<b>Viscosity Index ASTM D2270</b>	139	139	139
<b>Oxidation drop in psi @ 100 hrs, ASTM D942</b>	≤3	≤3	≤3
<b>Oxidation by PDSC minutes @ 155°C, ASTM D5483</b>	>120	>120	>120
<b>Corrosion Prevention DI H2O, ASTM D1743</b>	Pass	Pass	Pass
<b>Corrosion Prevention 1% Sea H2O, ASTM D5969</b>	Pass	Pass	Pass
<b>Oil Separation 30 hrs @ 100°C, % bleed, ASTM D6184</b>	≤2.00	≤2.00	≤4.00
<b>Timken OK Load lbs, ASTM D2509</b>	60	60	60
<b>Four-Ball EP Weld Point kgf, ASTM D2596</b>	620	620	620
<b>Four-Ball EP Load Wear Index kgf, ASTM D2596</b>	75	75	75
<b>Four-Ball Wear @ 75°C, 1,200 rpm, 40 kgf, 60 minutes, mm wear, ASTM D2266</b>	0.50	0.50	0.50
<b>Water Spray-off % loss, ASTM D4049</b>	15.0	-	-
<b>Copper Corrosion 24 hrs @ 100°C, ASTM D4048</b>	1b	1b	1b

### Typical Applications

- Food processing applications, such as:
  - » Blenders, cookers, filling machines, canning machines, bottling machines, packaging equipment

### Performance Requirements Met or Exceeded

- NSF H1
- Halal (certified by IFANCA)
- Kosher Pareve

### Operating Temperature Range

Number	NLGI Grade	*
4072	2	-26 to 204°C (-15 to 400°F)
4071	1	
4070	0	

\*This is a general rule of thumb and is dependent on operating conditions and relubrication intervals. If you have any questions or concerns, please contact LE Technical Services.