

# SAFE LUBE™

Industrial Lubricants & Metalworking Fluids



## SAFE LUBE™ HYDRAULIC FLUIDS ISO Grades 32, 46 & 68

**DESCRIPTION:** *SAFE LUBE™ Hydraulic Fluids* are comprised of unique blends of vegetable oils plus performance additives for hydraulic systems calling for ISO grade fluids. Superior boundary lubrication is supplied by state-of-the-art botanical blends while wear-reducers provide extra protection for particularly difficult applications. Load-carrying capability is installed via a unique 100% botanical-ester. This allows use of “green chemistry” to provide hydraulic ISO requirements in a regulatory-stable format.

### PROPERTIES:

ISO Grade	32	46	68	
Appearance	Straw Amber	Amber	Straw	
ASTM D445 Viscosity SUS @100° F / @ 210° F	194 / 55	250 / 61	455 / 73	
ASTM D445 Viscosity cSt @40° C / @ 100° C	38 / 8.5	49 / 10.3	89 / 13.5	
ASTM D445 ISO Range cSt @40° C	28.8 – 39.2	41.4 – 50.6	61.2 – 90.0	
ASTM D445 Viscosity Index	210	203	155	
ASTM D97 Pour Point ° F / ° C	< -22 / -30	< -22 / -30	< -22 / -30	
ASTM D92 Flash Point ° F / ° C	> 500 / 260	> 500 / 260	> 500 / 260	
ASTM D4052 API Gravity	22.4	22.4	24.0	
ASTM D974 Total Acid Number (Neut.No.)	0.24	0.34	47.7	
ASTM D2272 Rotating Bomb Oxidation Test (Pass = < 25.4 psi drop)	22	24	16	
ASTM D2266 & D4172 4-Ball Wear Test	mm @ 20 kg	0.56	0.46	0.43
	mm @ 40 kg	0.56	0.49	0.60

### ADVANTAGES:

- Reduces fluid temperatures up to 20°F
- Extending fluid and equipment life
- Inhibits hydraulic fluid foaming and oxidation
- Reduces system and pump wear
- Prevents sticking and seizing of actuators and servo valves
- Increased seal life and resilience
- Will not create sludge or varnish, increased life of fluids in system
- Used oil is not hazardous, reducing disposal costs
- Safe for Workers - not a skin or lung irritant
- Unregulated product - not reported under: SARA, STCA or RCRA
- Environmentally safe - Readily biodegradable (US EPA 560/6-82-003)

### SAFE LUBE™ PRODUCTS ARE:

- Non-toxic
- Non-reactive
- Non-carcinogenic
- Readily biodegradable
- Derived from renewable resources
- Safe to use, store and dispose of

### SAFE LUBE™ PRODUCTS DO NOT CONTAIN:

- Petroleum distillates
- Sulfur
- Chlorine
- Synthetics
- Heavy Metals

The information contained herein is believed to be correct including test data conducted under controlled laboratory conditions. Users of **SAFE LUBE** products should perform their own test(s) to determine the suitability of the product for their specific application(s). For questions: techsupport@gemtek.com

A Division of **GEMTEK® Products**

3808 North 28<sup>th</sup> Avenue • Phoenix, AZ 85017 • 602-265-8586 • FAX 602-265-7241 • www.gemtek.com