

Super Lube[®]

Synthetic oil and grease with PTFE

Synco Chemical Corporation

Bohemia, New York, U.S.A.

U.S. Patent Nr. 5,037,566

SYNCO CHEMICAL CORPORATION

- Synco Chemical Corporation was founded in February 1980 by Mr. Sal A. Randisi Sr. and his wife Hilda
- Developed a stable “PTFE” dispersion formula
- Hold several U.S. and world-wide patents and trademarks
- Manufactures synthetic lubricants under the Super Lube[®] brand name
- Super Lube[®] products are sold to consumer and industrial markets around the world
- ISO 9001-2008 certified

“PTFE” Based Lubricants

- PTFE means Polytetrafluoroethylene
- PTFE is a polymer with extremely low coefficient of friction with excellent non-stick properties
- High density, difficult to make as a stable dispersion
- Synco Chemical Corporation holds a patented proprietary manufacturing process that results in stable PTFE dispersion in a synthetic base fluid with excellent lubricating properties

Super Lube[®] Properties

- Stable compound
 - Does not melt, separate, drip or run
 - Wide temperature range
 - Resists oxidation and is impervious to salt water
 - Does not evaporate or form gummy deposits
 - Extremely low vapor pressure
 - Waterproof, will not wash away
 - Clean, non-toxic and non-staining

Super Lube[®] Properties (Continued)

- Physical Properties
 - Appearance
 - Translucent colorless fluid or gel
 - Viscosity
 - Grease...850,000 ± 50,000 cps
 - Fluid...200 ± 20 CPS
 - Flash Point
 - >428° F (220° C)
 - Fire Point
 - >572° F (300° C)
 - Specific Gravity
 - 0.87 g/cc

Super Lube[®] Properties (Continued)

- Physical Properties (Continued)
 - Water Solubility
 - Insoluble
 - Dielectric Constant
 - 2.5 (ASTM-D924)
 - Dielectric Resistance
 - 1.7×10^{12}
 - Oil Separation
 - Nil (ASTM-D1402)
 - Evaporative Loss
 - <1% (ASTM-D972)

Super Lube[®] Properties (Continued)

- Physical Properties (Continued)
 - Oxidation Stability
 - 0.0 PSIG (ASTM-D924 & 943)
 - Copper Corrosion
 - 1B, Shiny (ASTM-D4808 & 130)
 - Warranty
 - Two (2) Years

Super Lube[®] Performance Tests

- Four Ball Test (ASTM-D2596 & 2783)
 - Load Wear Index-81.73 Kg EP-124.6 Kg
 - Weld Point...400 Kg EP-800 Kg
- Four Ball EP Test (ASTM-D2266 & 4172)
 - Scar Diameter...<0.5
- Timken OK Load Test (ASTM-2509 & 2782)
 - 40 Pounds EP-50 Pounds

Super Lube[®] Toxicity Data

(Continued)

- Oral LD₅₀
 - >5 g/Kg
- Skin Irritation
 - Negative
- Eye Irritation
 - Negative
- Comedogenicity
 - Negative
- Inhalation
 - Not likely entry route (Very Low Vapor Pressure)

Environmental Impact

- No bio-resistance when challenged with mixed fungal inoculums under aerobic conditions. (Modified ASTM method E686-85)
- Not expected to Bio-Accumulate because of very high K_{ow} value, greater than 10 (Octanol/Water partition coefficient)
- The low vapor pressure of Super Lube[®] makes it an ideal candidate for “Clean Air Act” compliance. Super Lube[®] essentially contains no VOC’s (Volatile Organic Compounds).

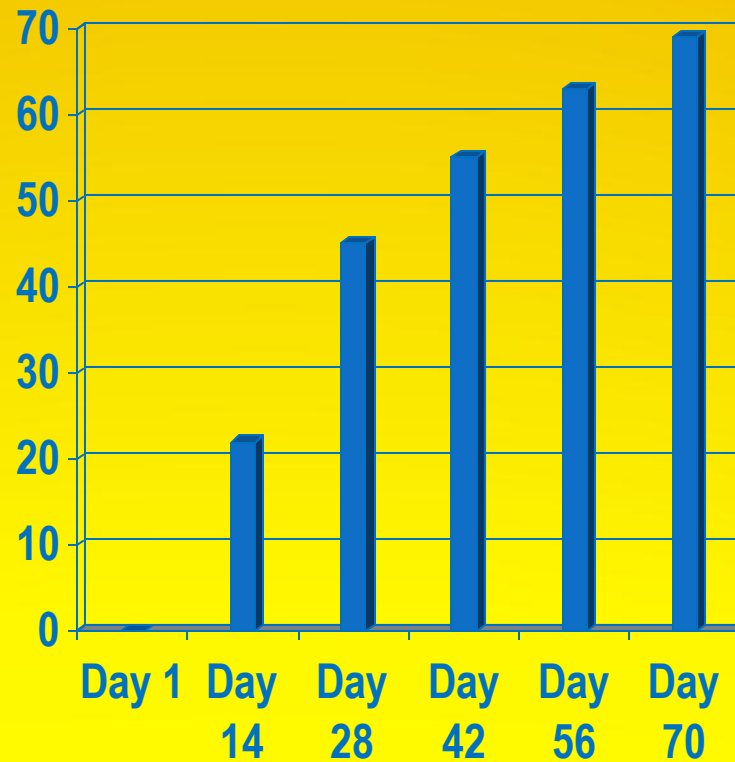
Super Lube[®] Environmental Impact

(Continued)

- Not expected to be toxic to aquatic organisms
 - Not readily bio-available (low water solubility)
 - Relatively inert in aquatic systems
- Inherently biodegradable
 - 50% degradability in 28 -35 days (Time extended test CEC-L33-T82 for “Comparative Biodegradability”)
 - Continues to biodegrade indefinitely. (Reaches 60+% in 56 days)

Super Lube[®]

Biodegradability



Super Lube[®] Applications

- “If it slides, swivels, rolls or squeaks”, it needs Super Lube[®]
- Reduces wear
- Eliminate resistance to sliding or rolling
- Prevents corrosion
- Prevents sticking and seizure
- Reduces or eliminates noise
- Almost all mechanical motion improves with proper lubrication

Super Lube[®] Markets

Commercial and Industrial

- Automotive industry
- Railroads and transit companies
- Food and packaging industry
- Metalworking and fabrication industry
- Hotels, hospitals and commercial buildings
- Manufacturing plants
- Paper industry

Super Lube[®] Advantages

- Extremely efficient lubricant
- Environmentally friendly
- Non-toxic
- Bio-degradable
- Waterproof
- Non-staining
- Non-aging
- Excellent durability
- Outlast petroleum based lubricants
- Economically efficient
- Excellent tracking ability
- Excellent viscosity stability
- Functional over a wide temperature range (-45° F to 450°F)
- Available in a variety of convenient forms
 - Grease
 - Oil
 - Aerosol

Super Lube[®] Advantages (Continued)

- U.S.D.A. rated
- N.S.F. rated
- Odorless
- Repels dirt, grit and grime
- Safe on rubber, plastic, leather, fabrics and paint
- Compatible with conventional lubricants
- Excellent film strength
- “PTFE has an affinity for metal surfaces
- Will not become gummy, hard or separate
- Salt water resistant
- Manufactured according to ISO 9001-2008 standards