

Wireline Products



Specializing in Lubricants and Chemicals
for Industrial and Commercial Applications

Willem Schoutenstraat 11 | 7825VV Emmen Nederland | T. +31 (0)591 676706 | F. +31 (0)591 676596 | E. info@jdtechniek.nl
www.jdtechniek.nl | KvK 04086269 | BTW NL8179.27.803.B01 | IBAN NL27 RABO 0118 3377 26

REVISIE EN VERKOOP VAN PROCESAPPARATUUR

Table of contents

Pages

• LCI-966.....	4
• 41-ISO (grades)	5
• SGS-700 Series.....	6
• SGS-800 Series.....	7
• Series 10-AG Series.....	8
• Lubchem 41-24 & 28 Visc	9
• Series 10-RG.....	10
• Series 10-WG.....	11



Willem Schoutenstraat 11 | 7825VV Emmen Nederland | T. +31 (0)591 676706 | F. +31 (0)591 676596 | E. info@jotechniek.nl
www.jotechniek.nl | KvK 04086269 | BTW NL8179.27.803.B01 | IBAN NL27 RABO 0118 3377 26

LCI-966

Formulated For CO2 Applications

Lubchem LCI-966 is a 100% synthetic formulation which protects wireline cables from the corrosive effects associated with CO₂ environments. Unlike hydrocarbon based lubricants, LCI-966 is totally impervious to CO₂ and H₂S.

LCI-966 provides for excellent seal retention, surface adhesion, and lubricity in wireline operations where extreme corrosive elements and high pressures exist.

Benefits

- 100% Synthetic
- Impervious to CO₂ and H₂S
- Less viscosity change with temperature fluctuations
- Prolonged wireline life expectancy
- Low surface tension
- Chemically inert and resistant to harsh down hole chemicals
- Reduces splatter and dripping at well location
- Provides enhanced corrosion package
- Very economical
- Pour point on all LCI-966 viscosities is -65°F
- Excellent oxidation and thermal stability

Application

LCI-966 is recommended for braid wireline, cables, and wire rope where harsh CO₂ and H₂S corrosive environments exist.

Standard Viscosities

LCI-966 10V	Viscosity Class Viscosity cSt 40°C	10 visc 275-375
LCI-966 12V	Viscosity Class Viscosity cSt 40°C	12 visc 750-850
LCI-966 16V	Viscosity Class Viscosity cSt 40°C	16 visc 1720-1920
LCI-966 20V	Viscosity Class Viscosity cSt 40°C	20 visc 7000-8000
LCI-966 24V	Viscosity Class Viscosity cSt 40°C	24 visc 10500-12000

Custom Viscosities

Custom viscosities are available in ranges from 275 cSt to 100,000 cSt

COLOR
Green

Packaging Sizes

55 Gallon Drum
275 & 325 Gallon Tote (Poly)
5 Gallon Pail

41-ISO (Grades)

Lubricant/Sealant w/Formasil

Lubchem 41-ISO is an excellent lubricant / sealant with extra corrosion inhibitors designed for more effective wireline inhibitors, lubrication and ease of wireline operations. For maximum protection 41-ISO provides an enhanced inhibitor package for applications where H₂S is present.

Benefits

- Provides enhanced corrosion package
- Provides both lubrication and sealing
- Protects against corrosion from down hole chemicals
- Prevents loss of well condensates and gases during wireline operations.
- Reduces corrosive effects of H₂S
- Reduces drip and splatter at well location
- Increases wireline life

Packaging Sizes

55 Gallon Drum
275 & 325 Gallon Tote (poly)
ISO Tank
5 Gallon Pail

Application

Lubchem 41 is recommended for braided wireline. If a higher viscosity is required please see our 41-24 technical data sheet. This product is also available in ISO grades 5,000 and 10,000.

Viscosity

Custom viscosities available to meet customer specifications.

Typical Properties

GRADE	68	220	460	680	1500
COLOR	LIGHT YELLOW	AMBER	AMBER	DARK AMBER	DARK AMBER
FLASH POINT, °F	>300	>300	>300	>300	>300
VISCOSITY RANGE cSt @ 40°F	61.2 - 74.8	198 - 242	414 - 506	612 - 748	1350 - 1650
POUR POINT	-40	-26	-12	-6	-6
RUST, D-3603	PASS	PASS	PASS	PASS	PASS
TEXTURE	TACKY LIQUID	TACKY LIQUID	TACKY LIQUID	TACKY LIQUID	TACKY LIQUID



Willem Schoutenstraat 11 | 7825VV Emmen Nederland | T. +31 (0)591 676706 | F. +31 (0)591 676596 | E. info@jdtechniek.nl
www.jdtechniek.nl | KvK 04086269 | BTW NL8179.27.803.B01 | IBAN NL27 RABO 0118 3377 26

SGS-700 SERIES BIODEGRADABLE WIRELINE HONEY OIL

Lubchem SGS-700 is a biodegradable series of synthetic grease seal products, developed to protect wireline exposed to environments where conventional wireline sealants fail. The product line is designed for use in deep, high temperature, corrosive oil, & gas wells, up to 400°F, in the presence of H₂S and CO₂.

Unlike conventional grease seal products, SGS-700 series maintains viscosity at elevated operating temperatures. A down hole corrosion inhibitor and EP additive package are incorporated and provide unequalled protection.

Features

- Completely biodegradable
- Non-hazardous
- Protects against H₂S up to 50,000ppm
- Protects against CO₂ up to 50%
- Fully additive treated

Performance Evaluation

The 700 series is made from a 100% synthetic polymer which is biodegradable, has no reportable quantity (see note), and is not considered hazardous waste. The products are offered in viscosity grades of 10, 12, 16, 20, and 24 to meet a wide range of operating temperature and handling requirements. Each viscosity grade contains an additive package which includes an EP (extreme pressure) additive and a down hole corrosion inhibitor.

Corrosion Inhibitor Package

The synthetic polymer base oil is an excellent sealant which provides a formidable barrier against wear and corrosion to wireline in highly corrosive and high temperature applications. The carrier oil in the SGS-700 series formulations are considered a barrier or protective layer designed to keep the corrosive elements away from the metal. However, it is not the sole source of protection. Lubchem SGS-700 series formulation also inhibitor (Lubchem IS-3018) along with an excellent EP (Extreme pressure) package. The corrosion inhibitor, Lubchem IS-3018 is effective at levels as low as 5ppm. The inhibitor chemically bonds to the wireline surface and provides an inhibitor film one molecule layer thick. This inhibitor layer will not degrade under any concentration of H₂S, acids, O₂, and CO₂.

Packaging Sizes

55 Gallon Drum
 275 & 325 Gallon Tote (Poly)
 ISO Tank
 5 Gallon Pail

Application

For use with standard wireline grease injection units.
 Not rec. for use w/ alcohols or glycols. (see 4i products)

Product Features

The synthetic polymer oil used in the formulation of Lubchem SGS products provides good lubrication qualities, excellent high temperature stability, and is insoluble in down hole environments. The result is a product that provides barrier protection from corrosive fluids and gasses, maintains viscosity at elevated temperatures (better than traditional hydrocarbon based fluids) and remains on the wire line, thereby reducing costs. The SGS-700 series synthetic polymer base oil has been selected due to its unique properties which include the following:

- SGS-700 series maintains viscosity under temperatures encountered at bottom hole environments.
- SGS-700 series is insoluble in down hole environments.
- SGS-700 series is highly impermeable, and is impervious to CO₂, H₂O, O₂, H₂S and water vapor.
- SGS-700 series is non-volatile, has high oxidation stability and is extremely resistant to shear.

Solubility

Toluene	Insoluble @ 77°F Slight Solubility @ 212°F
Cyclohexane	Insoluble @ 77°F Insoluble @ 167°F
Water	Insoluble @ 77°F Insoluble @ 210°F

***Not recommended for alcohol service**

SGS-800 Series Biodegradable Wireline Honey Oil

Lubchem SGS-800 is a biodegradable series of synthetic grease seal products, developed to protect wireline exposed to environments where conventional wireline sealants fail. The SGS-800 line is designed for use in deep, high temperature, corrosive oil and gas wells, up to 475°F in the presence of H₂S and CO₂.

Unlike conventional grease seal products, the SGS-800 series maintains viscosity at elevated operating temperatures. A down hole corrosion inhibitor and EP additive package are incorporated and provide unequalled protection.

Features

- Completely biodegradable
- Non-hazardous
- Protects against H₂S up to 500,000ppm
- Protects against CO₂ up to 50%
- Fully additive treated

Performance Evaluation

The SGS-800 series is made from a 100% synthetic polymer which is biodegradable, has no hazardous transportation limit and is not considered hazardous waste. The products are offered in Viscosity grades of 10, 12, 16, 20 and 24 to meet a wide range of operating temperature and handling requirements. Each viscosity grade contains an additive package which includes an EP (extreme pressure) additive and a down hole corrosion inhibitor.

Corrosion Inhibitor Package

The synthetic polymer base oil is an excellent sealant which provides a formidable barrier against wear and corrosion to wireline in highly corrosive and high temperature applications. The carrier oil is in the SGS-800 series formulations are considered a barrier or protective layer designed to keep the corrosive elements away from the metal. However, it is not the sole source of corrosion protection. Lubchem SGS-800 formulations also incorporate a high performance down hole corrosion inhibitor (Lubchem IS-3018) along with an excellent EP (extreme pressure) Package. The corrosion inhibitor, Lubchem IS-3018 is effective at levels as low as 5ppm. The inhibitor chemically bonds to the wireline surface and provides an inhibitor film one molecule layer thick. This inhibitor layer will not degrade under any concentration of H₂S, acids, O₂, and CO₂.

Application

For use with standard wireline grease injection units. The synthetic polymer oil used in the formulation of Lubchem SGS products provides good lubrication qualities, excellent high temperature stability, and is insoluble in down hole environments. The result is a product that provides barrier protection from corrosive fluids and gasses, maintains viscosity at elevated temperatures (better than traditional hydrocarbon based fluids) and remains on the wire line, thereby reducing costs. The SGS-800 series synthetic polymer base oil has been selected due to its unique properties which include the following:

- SGS-800 series maintains viscosity under temperatures encountered at bottom hole environments.
- SGS-800 series is insoluble in down hole environments.
- SGS-800 series is highly impermeable, and is impervious to CO₂, H₂O, O₂, H₂S and water vapor.
- SGS-800 series is non-volatile, has high oxidation stability and is extremely resistant to shear.

Solubility

Toluene	Insoluble @ 77°F / Slight Solubility @ 212°F
Cyclohexane	Insoluble @ 77°F / Insoluble @ 167°F
Water	Insoluble @ 77°F / Insoluble @ 210°F

Custom Viscosities Available

Custom viscosities are available in ranges from 1000 cSt to 260,000 cSt. Custom viscosities can be controlled to within 1% of the customers specification. In other words, if a viscosity of 26,781 cSt provides the sealing you require, your product will be 26,781 cSt every time you use it.

Series 10-AG Synthetic Arctic Grade Biodegradable Wireline Lubricant/Sealant Resistant to CO₂ and H₂S

Series 10-AG (arctic grade) is formulated for use in the most extreme cold climates and is the most technologically advanced wireline lubricant/sealant available.

Series 10-AG is the ONLY cost effective, fully synthetic, biodegradable, non-toxic, arctic grade, CO₂/H₂S resistant, condensate and down hole chemical insoluble wireline lubricant/sealant on the market. Because Series 10-AG is insoluble in condensate and other down hole chemicals, its lower viscosity will still provide for reduced friction, wireline protective barrier, excellent sealing properties while at the same time allowing the operator to reduce head pressure and reduce amount of lubricant/sealant required on the job.

Benefits:

- Biodegradable/non-toxic
- Extreme low temperature
- Insoluble in condensate, brine water, and down hole chemicals
- Low viscosity reduces pump head pressures
- Pour point -55°C (-67°F)
- Resistant to CO₂ in concentrations up to 40%
- Contains no silicone - Silicone oil is soluble in condensate and has very poor lubricating properties
- Excellent lubricity
- Reduces splattering and dripping at well location
- Prolongs wireline life expectancy
- Excellent thermal and oxidation stability
- Has no hazardous transportation limit and is not considered hazardous waste

Application:

Series 10-AG is recommended in extreme cold environments for braided wireline, cables, and wire rope where harsh CO₂ and H₂S corrosive conditions exist. Recommended for applications where ambient temperatures reach reach -50/50°C. (-58°F).

Solubility:

Toluene	Insoluble @ 77°F Slight Solubility @ 212°F
Cyclohexane	Insoluble @ 77°F Insoluble @ 167°F
Water	Insoluble @ 77°F Insoluble @ 210°F

*Not recommended for alcohol service

Viscosity:

Viscosity Table	
ASTM D-446	
Given Temperature	cSt
-40°F	25,894
-30°F	9,722
-20°F	6,740
-10°F	3,385
32°F	328

Packaging Sizes:

55 Gallon drum
325 Gallon tote
ISO Tank

Lubchem 4I-24 & 28 Visc 4I-24 With Formasil

Lubchem 4I is an excellent 24 viscosity lubricating sealant with extra corrosion inhibitors, designed for more effective wireline lubrication and ease of wireline operations. For maximum protection 4I-24 provides an enhanced inhibitor package for applications where H₂S is present.

There are a variety of viscosity grades to select from and special viscosity grades can be manufactured at customers request (24,16,12 & 10 are standard viscosities). Please also view 4I-ISO for additional viscosities.

Lubchem 4I-24 is recommended for operations where high pressures exist, thus providing better seal retention. In addition to maintaining and holding higher seal pressures. Lubchem 4I-24 will reduce friction of the wireline, thus keeping wear on wireline and flow tubes to a minimum. 4I-24 will help retain higher working pressures, resulting in reducing the loss of condensate, fluids, or gas from the well.

Lubchem 4I is very effective under high shock conditions for the reduction of drip and spatter. The special cohesive and adhesive properties prevent wellsite contaminations.

Lubchem 4I reduces the corrosive effects of acids, caustics, salt water, and hydrogen sulfide (H₂S).

Benefits:

- Provides enhanced corrosion package
- Provides both lubrication and sealing
- Protects against corrosion from downhole chemicals
- Prevents loss of well condensates and gasses during wireline operation
- Reduces corrosive effects of H₂S
- Reduces drip and splatter at well location
- Increases wireline life

Application:

Lubchem 4I is recommended for braided wireline, cables and wire rope. It is applied by grease injector control heads and cable lubricators.

4I-24 Typical Observation

Color	Amber
Texture	Tacky Liquid
Odor.....	Mild
API Gravity @ 60F (15C)	31
Density, lb/gal @ 77F (25C)	7.25
Specific Gravity, @ 77F (25C)	0.869
Flash Point, ASTM D-92	390F(198C)
Pour Point, ASTM D-97	31F(-0.5C)
Viscosity, 250°C.....	22400-2440
Viscosity Index y((VI)).....	315
Rust -Preventive Test, ASTM D-3603	
@140F(60C)	PASS
28 Vis Grade @40°C = 9300-9700	

For additional protection, SGS-700 Series & SGS-800 series are recommended for use in wireline operations exposed to CO₂ and H₂S environments.



SERIES 10-RG

Regular Grade Synthetic

Biodegradable Wireline Lubricant/Sealant

Resistant To CO₂ And H₂S

Series 10-RG is highly insoluble in water, condensate and other down hole chemicals. Made from most technologically advanced oils, Lubchem's Series 10-RG has superior adhesion capabilities which reduces splatter and drip while providing a protective coating against condensate, CO₂, H₂S, caustic acids, brine, and other chemicals present down hole.

Series 10-RG contains a specifically balanced combination of corrosion inhibitors, CO₂/H₂S inhibitors, anti oxidants and anti-wear additives for reducing friction and keeping wireline wear down to a minimum even under the most extreme operating environments.

Benefits

- Insoluble in condensate
- Insoluble in brine water
- Pour point -10°F
- Resistant to CO₂ in concentration up to 40%
- Biodegradable / Non toxic
- Contains no silicone oil
- Excellent lubricity
- Reduces splattering and dripping around equipment being used on the rig floor
- Prolongs wireline life expectancy
- Excellent thermal and oxidation Stability
- Has no hazardous transportation limit and not considered hazardous waste

Packaging Sizes

55 Gallon Drum
325 Gallon Tote
ISO Tank

Application

Series 10-RG wireline lubricants/sealant are recommended for braided wireline, cables, and rope wire where harsh CO₂ and H₂S corrosive conditions exist. Series 10-RG is recommended where ambient temperatures do not go below -10°F.

Solubility

Toluene	Insoluble@ 77°F Slight Solubility@ 212°F
Cyclohexane	Insoluble@ 77°F Insoluble@ 167°F
Water	Insoluble@ 77°F Insoluble@ 210°F

**Not recommended for alcohol service*

Viscosity

Custom viscosities available to meet customer specifications.

SERIES 10-WG

Synthetic Winter Grade

Biodegradable Wireline Lubricant/Sealant

Resistant To CO₂ And H₂S

Lubchem's Series 10-WG is highly advanced biodegradable, synthetic lubricant/sealant that provides superior protection for braided wireline, cables, and wire rope where harsh CO₂, and H₂S corrosive conditions exist.

Series 10-WG will reduce head pressure while being insoluble in water, condensate and other down hole chemicals, Series 10-WG is 100% synthetic grease seal developed to protect wireline exposed to environments where conventional wireline sealants fail.

Benefits

- Insoluble in condensate
- Insoluble in brine water
- Pour point -20°F
- Resistant to CO₂ in concentrations up to 40%
- Biodegradable
- Contains no silicone oil
- Excellent lubricity
- Reduces splattering and dripping at well location
- Prolongs wireline life expectancy
- Excellent thermal and oxidation stability
- Reduces pump head pressure

Packaging Sizes

55 Gallon Drum
325 Gallon Tote
ISO Tank

Application

Series 10-WG is recommended in cold environments for braided wireline, cables, and wire rope where harsh CO₂ and H₂S corrosive conditions exist. Recommended for applications where ambient temperatures reach -20°F

Solubility

Toluene	Insoluble@ 77°F Slight Solubility@ 212°F
Cyclohexane	Insoluble@ 77°F Insoluble@ 167°F
Water	Insoluble@ 77°F Insoluble@ 210°F

Viscosity

Custom viscosities available to meet customer specifications.



Willem Schoutenstraat 11 | 7825VV Emmen Nederland | T. +31 (0)591 676706 | F. +31 (0)591 676596 | E. info@jdtechniek.nl
www.jdtechniek.nl | KvK 04086269 | BTW NL8179.27.803.B01 | IBAN NL27 RABO 0118 3377 26



Willem Schoutenstraat 11 | 7825VV Emmen Nederland | T. +31 (0)591 676706 | F. +31 (0)591 676596 | E. info@jdtechniek.nl
www.jdtechniek.nl | KvK 04086269 | BTW NL8179.27.803.B01 | IBAN NL27 RABO 0118 3377 26



Wire Armor - Water Soluble Wireline Grease Seal

The Environmentally Responsible Choice

Patent Pending

Wire Armor wireline grease are viscous, tacky, water soluble lubricants and sealants for use in oil and gas wireline applications where a lubricating dynamic seal is required. Formulated with advanced corrosion inhibitors to protect against corrosion in harsh high pressure down-hole environments where exposure to moisture, H₂S, and corrosive fluids occur. Wire Armor wireline grease seals are available in standard and custom viscosities to meet virtually any application on the planet. Viscosity Grades **WA-916, 920, 924, 928.**

Environmental Considerations:

Formulated from renewable and biodegradable base materials our Wire Armor is the most environmentally acceptable grease seal product on the market today. This compound blend provides the level of biodegradation required to meet the biodegradability standards for OSPAR & Blue Angel compliance.

Features & Benefits:

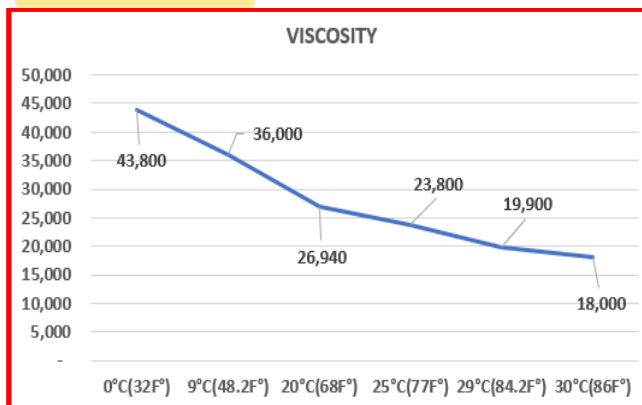
- Cleans up with hot or cold water
- TOC – 41%
- Will not sheen on water.
- High viscosity and tack
- Water resistant
- Enhanced corrosion package
- Provides lubrication and sealing
- Reduces loss of well fluids during operation
- Non-toxic
- Non-flammable
- Reduces drip and splatter
- Completely biodegradable
- Non-hazardous
- Protects against H₂S
- Protects against CO₂
- Fully additive treated
- Prevents oxygen induced corrosion

Corrosion Protection:

Atmospheric Corrosion Testing (21 days)

Coupon Material	Metal loss
Untreated (control)	.0026
WL-724	.0000
BWL-824	.0000
WA-924	.0000

Armor Shield 924





WIRE ARMOR SPRAYS

Wire Armor Wireline Spray is formulated with a proprietary biodegradable base fluid and built with high performance corrosion inhibitors to provide long term protection in corrosive conditions. Wire Armor will penetrate the surface of the cable down to the inner core of the wireline.

****Available in the following viscosity grades: ASTM D445 @ 25° C, Viscosity 36 – 41 est****