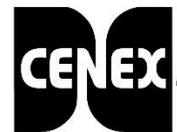


Cenex Sure Seal WL[®]



Wireline Lubricant and Sealant

General Description

Cenex Sure Seal WL[®] is a premium, high-quality, tacky viscous wireline lubricant developed to provide superior performance in the oil and gas drilling industry. In addition, this product was designed to provide the wireline cable with the extra rust and corrosion protection needed with downhole drilling. It is designed for use as a sealant and lubricant in the oil and gas drilling industry.

This fluid is fortified with extra additives to provide excellent corrosion, wear and oxidation protection. The corrosion inhibitor in Cenex Sure Seal WL protects the wireline cable against salt water, or well-born gases such as H₂S, caustics, and acids. The inhibitors in Cenex Sure Seal WL reduce corrosion, and will prevent premature failure which effectively extends the life of the wireline cable.

Cenex Sure Seal WL is designed to provide and maintain an effective seal around the wireline in a high pressure, high temperature environment thus preventing the escape of well-born gases such as H₂S.

This fluid's superior lubrication attributes extend the wireline life by effectively reducing friction and wear caused by continuous use.

The high viscosity index allows Cenex Sure Seal WL to be used over a wide temperature range while maintaining its viscosity down the well hole. There are nine (9) viscosity grades of this fluid available for use which allows the operator to continue drilling under all temperatures and conditions.

Note: This product is not designed for and should not be used in any wire rope application.

Expect excellent performance in these applications:

- As a cable lubricant in the oil field drilling industry
- As a sealant in the gas and oil field drilling industry
- Braided wireline used in the oil and gas industry
- Applied injection control head units
- Downhole tools and equipment

Features and Benefits

- **Tacky Product:** Provides superior tackiness to reduce splatters and drips. Designed to provide dripless performance because of its increased adherence to the wireline.
- **Sealing Capabilities:** Formulated to provide superior sealing properties and designed to prevent the loss of well condensation and gases.
- **High Viscosity Index:** Excellent viscosity retention when used within the recommended temperature range. Good low temperature fluidity.
- **Corrosion Protection:** Protects wireline against the corrosive properties of salt water, downhole gases and chemicals such as H₂S.
- **Handling:** Pump-able product designed specifically for use as a wireline grease for injection units and cable lubrication.
- **Year-round Use:** Effective performance from -25°F to 100+. Nine viscosity grades allow for the use of the right grade for all temperatures and conditions.

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Typical Properties

ISO Grade	Winter Grades		Mid-Season Grades			Summer Grades			
	ISO 68	ISO 220	ISO 680	ISO 1500	ISO 2500	ISO 5000	ISO 7500	ISO 10000	ISO 13000
Product Grade	68	220	680	1500	2500	5000	7500	10000	13000
API Gravity	34.1	34.1	34.2	34.2	34.2	34.2	34.2	34.2	34.2
Pounds/Gal	7.12	7.12	7.11	7.11	7.11	7.11	7.11	7.11	7.11
Color	Water White	Water White	Water White	Water White	Water White	Water White	Water White	Water White	Water White
Appearance	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright
Texture	Tacky Liquid	Tacky Liquid	Tacky Liquid	Tacky Liquid	Tacky Liquid	Tacky Liquid	Tacky Liquid	Tacky Liquid	Tacky Liquid
100°C Viscosity Cst	12	33	87	162	236	468	691	1003	1050
100°C Viscosity SSU	68	175	465	812	1180	2314	3337	4618	4897
40°C Viscosity Cst	69	219	701	1590	2500	5085	7626	10035	12029
40°C Viscosity SSU	316	996	3185	7225	11600	23107	34653	45599	55718
Viscosity Index	175	196	213	220	235	269	292	327	314
Pour Point °C/°F	-42/-44	-39/-38	-39/-38	-36/-33	-33/-27	-33/-27	-24/-11	-24/-11	-18/0
Operating Temperature Range °F	-25 to 15	-10 to 30	20 - 60	25 - 75	30 - 80	50 - 85	65 - 95	70 - 100	90+
Range in Temp °F	40	40	40	40	35	35	30	30	N/A
Operating Temperature Range °C	-32 to -9	-23 to -1	-7 to 16	-4 to 24	-1 to 27	10 to 29	18 - 35	21 - 38	32+
Range in Temp °C	21	22	22	28	28	19	17	17	N/A

The typical properties listed reflect the general characteristics of the product, and are not manufacturing specifications. Normal batch-to-batch variations should be expected.

Health & Safety:

A complete safety data sheet is available by calling 1-651-355-8438 or visit cenex.com/sds-library.