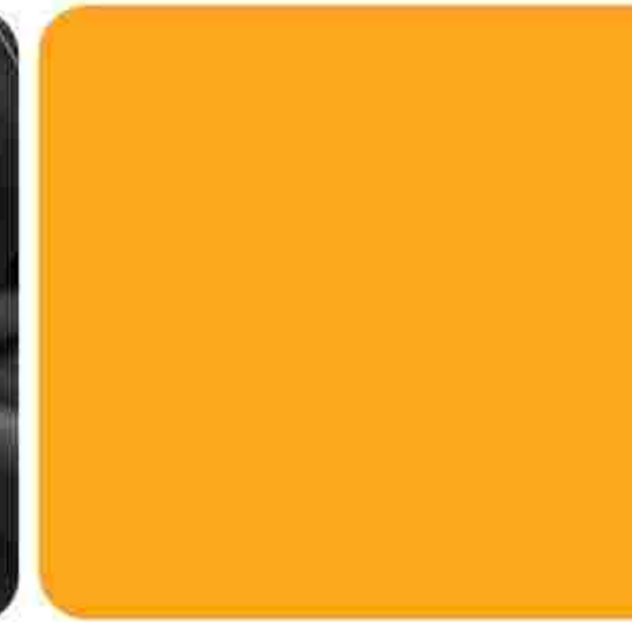


# ***HIGHLUB***

**ENGINE OIL & LUBRICANTS**







**Engine Oil & Lubricants**

## **Introduction:**

**We are manufacturer and exporter of various kinds of engine oil & lubricants. Our factory is located in IRAN.**

**Our products are designed for all the segments from Two Stroke (2T) Engine Oils for two wheelers/bikes to Hydraulic and Turbine Oils for Industrial plants.**

**Our main markets are Middle East (ME) , Africa and CIS countries . We are using fully automated Blending system with latest Machineries and technologies.**

**Accessibility to high quality raw material with competitive prices is our main advantage to serve respectful customers world-wide.**

**Following Pages will introduce part of our capabilities and Products.**



# Catalog Index :

## Highlub Products

### A. ENGINE OIL

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- API : SF/CD
- API : CD
- API : SJ/CF
- API : SL/CF
- API : SM
- API : SN
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### B. HYDRAULIC OIL

- 32
- 46
- 68
- 100
- 150
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- 30 - 40
- 40 - 50
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Engine Oil & Lubricants





## Gasoline Engine Oil ( API : SC/CC )

### Product Introduction :

HIGHLUB Engine Oil API SC/CC is a blend of highly refined mineral oils & high performance additives to ensure extreme performance. It is recommended for use in a wide range of applications including gasoline and light duty diesel engines found in motorcycles, passenger cars, agricultural and construction machineries and certain hydraulic systems. They are blended to meet API service classification SC/CC requirements.



# HIGHLUB

## Engine Oil & Lubricants

### APPLICATIONS:



### TYPICAL PROPERTIES

PARAMETERS	TEST METHOD	UNIT	TYPICAL TEST RESULT		
SAE Grade			30	40	50
Color	ASTM D 1500	-	L 3.0	L 3.0	L 3.5
Kinematic Viscosity 104°F/ 40°C	ASTM D 7042	cST	TBR	TBR	TBR
kinematic viscosity 212°F/ 100°C	ASTM D 7042	cST	11.3	14.8	19.6
Viscosity Index (min)	ASTM D 2270	-	90	95	98
S.P gravity 60°F	ASTM D 4052	g/Cm <sup>3</sup>	0.882	0.888	0.895
Flash Point (min)	ASTM D 92	°C	240	230	240
pour point (max)	ASTM D 97	°C	-15	-15	-15
TBN	ASTM D 2896	Mg KOH/G.	4	4	4
NOACK (max)	D 5800	Wt. %	10	10	10

### AVAILABLE PACKAGING

Packing	Details
1 L	12x1 L carton
4 L	4x4 L carton
5 L	4x5 L carton
20 L	1x20 L gallon
Drum	1x200 L drum
	1x208 L drum



## Gasoline Engine Oil ( API : SF/CD)

### Product Introduction :

HIGHLUB Multigrade Engine Oil API SF/CD is a high performance lubricant designed to meet very severe performance requirements for a range of high-out engines. It is formulated from premium mineral base oil and specialized additives for service in gasoline and diesel engines where SF/CD requirement is recommended.

### APPLICATIONS:



### TYPICAL PROPERTIES

PARAMETERS	TEST METHOD	UNIT	TYPICAL TEST RESULT		
SAE Grade			40	15W- 40	20W- 50
Color	ASTM D 1500	-	L 3.0	L 3.0	L 3.0
Kinematic Viscosity 104° F/ 40° C	ASTM D 7042	cST	TBR	TBR	TBR
kinematic viscosity 212° F/ 100° C	ASTM D 7042	cST	15	15.3	19
Viscosity Index (min)	ASTM D 2270	-	95	135	125
S.P gravity 60° C	ASTM D 4052	g/Cm <sup>3</sup>	0.8900	0.8840	0.8880
Flash Point (min)	ASTM D 92	°C	240	220	230
pour point (max)	ASTM D 97	°C	-15	-27	-24
TBN	ASTM D 2896	mG KOH/G.	6	6	6
CCS , CP (max)	D 5293	Wt. %	N/A	7000 (-20)	9500(-15)
NOACK (max)	D 5800	Wt. %	10	18	118



### AVAILABLE PACKAGING

Packing	Details
1 L	12x1 L carton
4 L	4x4 L carton
5 L	4x5 L carton
20 L	1x20 L gallon
Drum	1x200 L drum
	1x208 L drum



**Diesel Engine Oil API : CD****Product Introduction :**

HIGHLUB API CD motor oil is a specially formulated super grade crank case diesel lubricant for all type of passenger cars, vans and light trucks operating under severe driving condition throughout the year. This oil is blended with highly refined paraffinic base oil and incorporated with effective additives and shear stable viscosity index improvers.

**Applications:****TYPICAL PROPERTIES**

PARAMETERS	TEST METHOD	UNIT	TYPICAL TEST RESULT		
SAE Grade			40	20W - 40	20W- 50
Color	ASTM D 1500	-	L 3.5	L 3.0	L 3.0
Kinematic Viscosity 104°F/ 40°C	ASTM D 7042	cST	TBR	TBR	TBR
kinematic viscosity 212°F/ 100°C	ASTM D 7042	cST	15	15.8	20.5
Viscosity Index (min)	ASTM D 2270	-	100	120	125
S.P gravity 60°C	ASTM D 4052	g/Cm <sup>3</sup>	0.8940	0.888	0.889
Flash Point (min)	ASTM D 92	°C	240	220	225
pour point (max)	ASTM D 97	°C	-21	-24	-24
TBN	ASTM D 2896	mG KOH/G.	8	8	8
CCS , CP (max)	D 5293	Wt. %	N/A	9500 (-15)	9500(-15)
NOACK (max)	D 5800	Wt. %	18	18	18

**AVAILABLE PACKAGING**

Packing	Details
1 L	12x1 L carton
4 L	4x4 L carton
5 L	4x5 L carton
20 L	1x20 L gallon
Drum	1x200 L drum
	1x208 L drum



## Gasoline Engine Oil API : SJ/CF

### Product Introduction :

HIGHLUB API SJ/CF is high quality engine oil designed to meet the requirements of passenger car and light truck engines where API SJ performance is recommended. It is for use in service typical of gasoline engines in present and earlier passenger cars, vans, and light trucks operating under manufacturers recommended maintenance procedures. This oil's special combination of detergent and dispersant additives controls piston and ring deposits that can adversely affect power and performance.

### APPLICATIONS:



### TYPICAL PROPERTIES

PARAMETERS	TEST METHOD	UNIT	TYPICAL TEST RESULT			
SAE Grade			0w - 40	10W - 40	15W - 40	20W - 50
Color	ASTM D 1500	-	L 1.5	L 2.0	L 2.5	L 3.5
Kinematic Viscosity 104°F/ 40°C	ASTM D 7042	cST	TBR	TBR	TBR	TBR
kinematic viscosity 212°F/ 100°C	ASTM D 7042	cST	14	14.50	15.00	19.00
Viscosity Index (min)	ASTM D 2270	-	160	150	135	130
S.P gravity 60°C	ASTM D 4052	g/Cm <sup>3</sup>	0.8434	0.8635	0.8810	0.8914
Flash Point (min)	ASTM D 92	°C	220	220	220	220
pour point (max)	ASTM D 97	°C	- 42	- 33	- 30	- 24
TBN	ASTM D 2896	mG KOH/G.	7.50	7.50	7.50	7.50
CCS , CP (max)	D 5293	Wt. %	6200 <sup>(-35)</sup>	7000 <sup>(-25)</sup>	7000 <sup>(-20)</sup>	9500 <sup>(-15)</sup>
NOACK (max)	D 5800	Wt. %	20	20	20	20



### AVAILABLE PACKAGING

Packing	Details
1 L	12x1 L carton
4 L	4x4 L carton
5 L	4x5 L carton
20 L	1x20 L gallon
Drum	1x200 L drum 1x208 L drum



## Gasoline Engine Oil API : SL/CF

### Product Introduction :

HIGHLUB API SL/CF is formulated with synthetic technology base oil and high performance additives, which is optimized to provide outstanding protection, Oxidization resistance and lubricity. It is for use in service typical of gasoline engines in present and earlier passenger cars, sports utility vehicles, vans and light trucks operating under vehicle manufacturers recommended maintenance procedures. This product may be used where API Service Category SL/CF and earlier categories are recommended.

### Applications:



### TYPICAL PROPERTIES

PARAMETERS	TEST METHOD	UNIT	TYPICAL TEST RESULT						
			0W - 30	0W - 40	5W - 50	5W - 40	10W - 40	10W- 60	20W- 50
SAE Grade			0W - 30	0W - 40	5W - 50	5W - 40	10W - 40	10W- 60	20W- 50
Color	ASTM D 1500	-	L 2.0	L 1.5	L 1.5	L 1.5	L 2.0	L 2.0	L 3.0
Kinematic Viscosity 104°F/ 40°C	ASTM D 7042	cST	TBR	TBR	TBR	TBR	TBR	TBR	TBR
kinematic viscosity 212°F/ 100°C	ASTM D 7042	cST	11.50	14.00	19.00	14.50	14.50	23.50	20.0
Viscosity Index (min)	ASTM D 2270	-	170	170	170	170	150	180	125
S.P gravity 60°C	ASTM D 4052	g/Cm <sup>3</sup>	0.8468	0.8441	0.8543	0.8543	0.8657	0.8563	0.8940
Flash Point (min)	ASTM D 92	°C	220	220	220	220	220	220	230
pour point (max)	ASTM D 97	°C	-42	-42	-39	-39	-33	-33	-27
TBN	ASTM D 2896	mG KOH/G.	8.00	8.00	8.00	8.00	8.00	8.00	8.00
CCS , CP (max)	D 5293	Wt. %	6200 (-35)	6200 (-35)	6600 (-30)	6600 (-30)	7000 (-25)	7000 (-25)	9500 (-15)
NOACK (max)	D 5800	Wt. %	15	15	15	15	15	15	15

### AVAILABLE PACKAGING

Packing	Details
1 L	12x1 L carton
4 L	4x4 L carton
5 L	4x5 L carton
20 L	1x20 L gallon
Drum	1x200 L drum 1x208 L drum

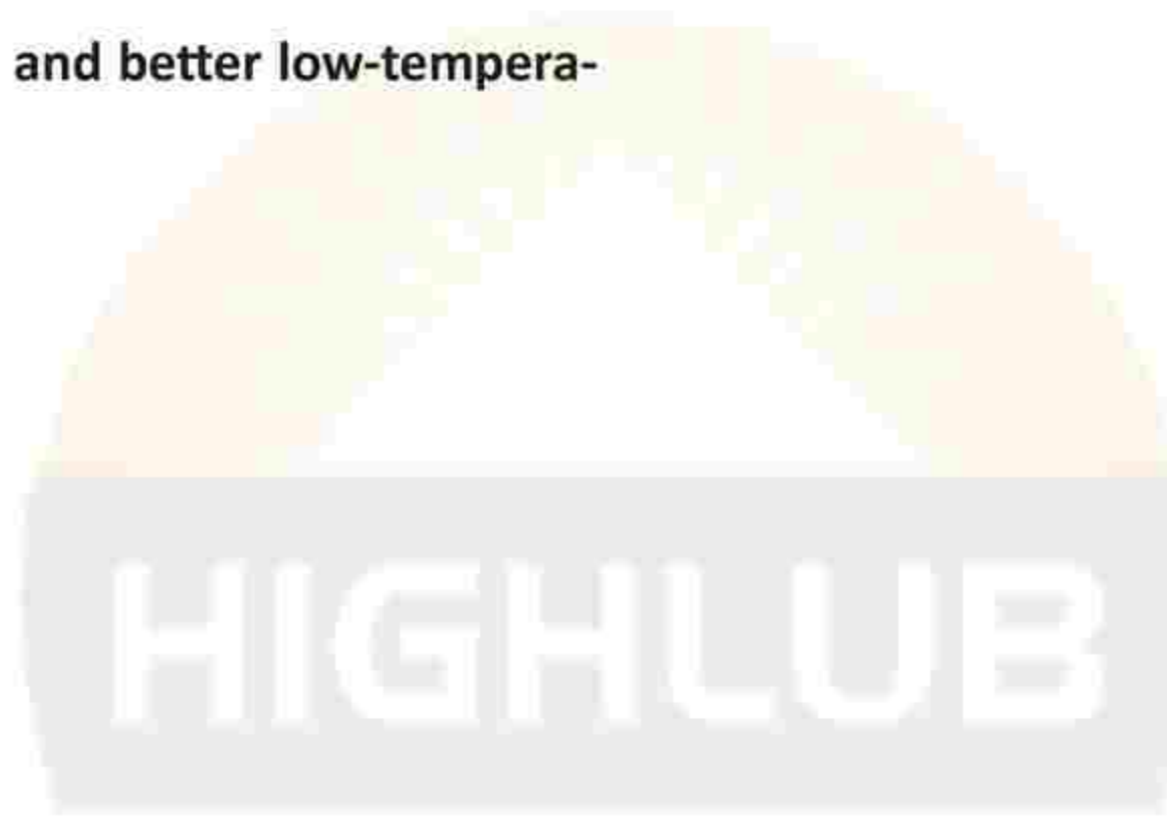


## Gasoline Engine Oil API : SM

### Product Introduction :

HIGHLUB API SM Synthetic Motor Oil is a high quality lubricant that incorporates anti-wear protection, as well as, protection against sludge and deposit formation. This multi-grade oil meets the highest API quality requirement (SM) for gasoline engine passenger cars, sport utility vehicles, vans and light trucks. These oils are designed to provide improved oxidation resistance, improved deposit protection, better wear protection, and better low-temperature performance over the life of the oil.

### APPLICATIONS:



### TYPICAL PROPERTIES

PARAMETERS	TEST METHOD	UNIT	TYPICAL TEST RESULT						
			0W - 30	0W - 40	5W - 50	5W - 40	10W - 30	10W- 40	10W - 60
SAE Grade			0W - 30	0W - 40	5W - 50	5W - 40	10W - 30	10W- 40	10W - 60
Color	ASTM D 1500	-	L 2.0	L 2.0	L 2.0	L 2.0	L 2.0	L 2.0	L 2.0
Kinematic Viscosity 104°F/ 40°C	ASTM D 7042	cST	TBR	TBR	TBR	TBR	TBR	TBR	TBR
kinematic viscosity 212°F/ 100°C	ASTM D 7042	cST	11.50	14.00	19.50	14.50	12.00	15.00	24.50
Viscosity Index (min)	ASTM D 2270	-	170	170	170	180	150	180	150
S.P gravity 60°C	ASTM D 4052	g/Cm <sup>3</sup>	0.8497	0.8468	0.8576	0.8571	0.8545	0.8571	0.8571
Flash Point (min)	ASTM D 92	°C	220	220	220	220	220	220	220
pour point (max)	ASTM D 97	°C	-42	-42	-39	-33	-39	-33	-33
TBN	ASTM D 2896	mG KOH/G.	10.50	10.50	10.50	10.50	10.50	10.50	10.50
CCS , CP (max)	D 5293	Wt. %	6200 (-35)	6200 (-35)	6600 (-30)	6600 (-30)	7000 (-25)	7000 (-25)	7000 (-25)
NOACK (max)	D 5800	Wt. %	15	15	15	15	15	15	15

### AVAILABLE PACKAGING

Packing	Details
1 L	12x1 L carton
4 L	4x4 L carton
5 L	4x5 L carton
20 L	1x20 L gallon
Drum	1x200 L drum 1x208 L drum



**Gasoline Engine Oil API : SN****Product Introduction :**

HIGHLUB API SN, Synthetic passenger car motor oil is specifically designed for high performance engine with higher compression ratio. It is recommended for use in engines requiring low viscosity lubricants under all operating conditions.

It is designed to provide improved high temperature deposit protection for pistons, more stringent sludge control, and seal compatibility

**APPLICATIONS:****TYPICAL PROPERTIES**

PARAMETERS	TEST METHOD	UNIT	TYPICAL TEST RESULT							
			0W - 20	0W - 30	0W - 40	5W - 30	5W - 40	5W - 50	10W - 40	10W - 60
SAE Grade			0W - 20	0W - 30	0W - 40	5W - 30	5W - 40	5W - 50	10W - 40	10W - 60
Color	ASTM D 1500	-	L 2.0	L 2.0	L 2.0	L 2.0	L 2.0	L 2.0	L 2.0	L 2.0
Kinematic Viscosity 104°F/ 40°C	ASTM D 7042	cST	TBR	TBR	TBR	TBR	TBR	TBR	TBR	TBR
kinematic viscosity 212°F/ 100°C	ASTM D 7042	cST	8.50	11.50	14.00	12.00	14.50	19.00	14.50	23.50
Viscosity Index (min)	ASTM D 2270	-	163	170	170	170	170	170	150	180
S.P gravity 60°C	ASTM D 4052	g/Cm <sup>3</sup>	0.849	0.8496	0.8481	0.8545	0.8567	0.8564	0.8564	0.8571
Flash Point (min)	ASTM D 92	°C	220	220	220	220	220	220	220	220
pour point (max)	ASTM D 97	°C	-42	-42	-42	-39	-39	-39	-33	-33
TBN	ASTM D 2896	mG KOH/G.	11	11	11	11	11	11	11	11
CCS , CP (max)	D 5293	Wt. %	6200(-35)	6200(-35)	6200(-35)	6600(-30)	6600(-30)	6600(-25)	7000(-15)	7000(-25)
NOACK (max)	D 5800	Wt. %	15	15	15	15	15	15	15	15

**AVAILABLE PACKAGING**

Packing	Details
1 L	12x1 L carton
4 L	4x4 L carton
5 L	4x5 L carton
20 L	1x20 L gallon
Drum	1x200 L drum 1x208 L drum



## Diesel Engine Oil API : CH - 4

### Product Introduction :

HIGHLUB Diesel Engine Oil API CH- 4 combines a high quality base stock with a proprietary, balanced additive system having a combination of metallic detergents, ashless dispersants and multi-purpose inhibitors. This oil assures superior control of oil thickening caused by soot buildup and high temperature oxidation, and also provides outstanding resistance to varnish deposits and corrosion.

### APPLICATIONS:



HIGHLUB

### TYPICAL PROPERTIES

PARAMETERS	TEST METHOD	UNIT	TYPICAL TEST RESULT	
SAE Grade			15W - 40	20W - 50
Color	ASTM D 1500	-	L 3.5	L 3.0
Kinematic Viscosity 104°F/ 40°C	ASTM D 7042	cST	TBR	TBR
kinematic viscosity 212°F/ 100°C	ASTM D 7042	cST	15.5	19.5
Viscosity Index (min)	ASTM D 2270	-	135	125
S.P gravity 60°C	ASTM D 4052	g/Cm <sup>3</sup>	0.884	0.888
Flash Point (min)	ASTM D 92	°C	225	235
pour point (max)	ASTM D 97	°C	- 27	- 25
TBN	ASTM D 2896	mG KOH/G.	13	13
CCS , CP (max)	D 5293	Wt. %	7000(-20)	9500(-15)
NOACK (max)	D 5800	Wt. %	15	15



### AVAILABLE PACKAGING

Packing	Details
1 L	12x1 L carton
4 L	4x4 L carton
5 L	4x5 L carton
20 L	1x20 L gallon
Drum	1x200 L drum 1x208 L drum



# A

HIGHLUB PRODUCTS  
Gasoline Engine Oil  
API : CI-4

## Diesel Engine Oil API : CI- 4

### Product Introduction :

HIGHLUB Diesel Engine Oil API CI - 4 is extra high performance diesel motor oil that provides excellent lubrication of today's diesel engines promoting extended engine life. As a result, this product meets and exceeds the specifications of virtually all major European and American engine manufacturers. This extra high performance has been proven in the field in a wide variety of industries, applications, and mixed fleets. This is designed for high-speed, four-stroke engines and is also designed to meet 2007 model year on-highway exhaust emission standards, it is effective at sustaining emission control system durability where particulate filters and other advanced after treatment systems are used.

### APPLICATIONS:



### TYPICAL PROPERTIES

PARAMETERS	TEST METHOD	UNIT	TYPICAL TEST RESULT		
SAE Grade			10W - 40	15W - 40	15W - 40
Color	ASTM D 1500	-	L 2.0	L 2.5	L 3.0
Kinematic Viscosity 104°F/ 40°C	ASTM D 7042	cST	TBR	TBR	TBR
kinematic viscosity 212°F/ 100°C	ASTM D 7042	cST	14.50	14.50	20.00
Viscosity Index (min)	ASTM D 2270	-	150	135	125
S.P gravity 60°C	ASTM D 4052	g/Cm <sup>3</sup>	0.880	0.880	0.890
Flash Point (min)	ASTM D 92	°C	220	220	230
pour point (max)	ASTM D 97	°C	-33	-30	-24
TBN	ASTM D 2896	mG KOH/G.	13.00	13.00	13.00
CCS , CP (max)	D 5293	Wt. %	7000(-25)	7000 (-20)	9500(-15)
NOACK (max)	D 5800	Wt. %	15	15	15



HIGHLUB PRODUCTS  
Gasoline Engine Oil  
API : CI-4

### AVAILABLE PACKAGING

Packing	Details
1 L	12x1 L carton
4 L	4x4 L carton
5 L	4x5 L carton
20 L	1x20 L gallon
Drum	1x200 L drum 1x208 L drum



## HYDRAULIC OIL

### Product Introduction :

HIGHLUB HYDRAULIC OIL is polyol ester type hydraulic fluids formulated with selected additives, available in four ISO viscosity grades: 68, 46, 32 and 100. This biodegradable and environmentally responsible fluid, which does not contain water, mineral oil or phosphate esters, can be used in place of a conventional antiwear hydraulic fluid in applications where there is a risk of fire or accidental environmental contamination, where it achieves excellent hydraulic fluid performance.

### APPLICATIONS:

- Hydraulic applications where there is a risk of fire or of accidental environmental contamination, where a conventional mineral-oil based anti-wear hydraulic fluid would present a fire hazard or pollution hazard.



### TYPICAL PROPERTIES

PARAMETERS	TEST METHOD	UNIT	TYPICAL TEST RESULT			
Grade			32	46	68	100
kinematic viscosity 104°F/ 40°C	ASTM D 7042	cSt	32	46	68	100
kinematic viscosity 212°F/ 100°C	ASTM D 7042	cSt	7.0	9.0	12.0	14.0
Viscosity Index (min)	ASTM D 2270	-	180	180	180	180
Air Release at 50°C	ASTM D 3427		10 Max	10 Max	10 Max	10 Max
Neutralization Number	ASTM D 974	KgKOH/g	2.0	2.0	2.0	0.8900
Pour point ( max)	ASTM D 97	°C	-20	-20	-20	-20

### AVAILABLE PACKAGING

Packing	Details
1L	12x1 L carton
4L	4x4 L carton
20 L	1x20 L gallon
Drum	1x200 L drum 1x208 L drum





## AUTOMATIC TRANSMISSION FLUID (ATF DEXRON II-D)

### Product Introduction :

HIGHLUB ATF DEXRON II-D is designed specifically for use in Automatic Transmission and Power Steering System in passenger cars and light duty trucks. This product has excellent anti-wear properties and may be used in hydraulic systems where good performance over a wide temperature range is desired.

### APPLICATIONS:

- Automatic Transmission Systems.
- Power Steering Unit.
- Mobile and Industrial Hydraulic Systems

### TYPICAL PROPERTIES

PARAMETERS	TEST METHOD	UNIT	TYPICAL TEST RESULT
SAE Grade			DEXRON II-D
Color	ASTM D 1500	-	RED
Kinematic Viscosity 104°F/ 40°C	ASTM D 7042	cST	TBR
kinematic viscosity 212°F/ 100 °C	ASTM D 7042	cST	8.50
Viscosity Index (min)	ASTM D 2270	-	165
S.P gravity 60°C	ASTM D 4052	g/Cm <sup>3</sup>	0.8600
Flash Point (min)	ASTM D 92	°C	200
pour point (max)	ASTM D 97	°C	-39



### AVAILABLE PACKAGING

Packing	Details
1 L	12x1 L carton
4 L	4x4 L carton
5 L	4x5 L carton
20 L	1x20 L gallon
Drum	1x200 L drum
	1x208 L drum





## AUTOMATIC TRANSMISSION FLUID (ATF DEXRON III-G)

### Product Introduction :

HIGHLUB ATF DEXRON III-G is a high performance automatic transmission fluid exceeding the latest revised specifications of DEXRON III-G Specification. This oil is recommended for most passenger car and commercial automatic transmissions and it is also suitable for power steering systems, hydraulic applications and some manual transmissions where an automatic transmission fluid is specified

### APPLICATIONS:

ATF DEXRON III-G can be used as the lubricating oil in several types of rotary air compressors under certain service conditions. Its low-temperature properties and resistance to oxidation are important factors in meeting the requirements of this service. Automatic and power-shift transmission of passenger cars, light commercial vehicles and industrial vehicles. Hydraulic systems where ATF type DEXRON III-G is recommended.

### TYPICAL PROPERTIES

PARAMETERS	TEST METHOD	UNIT	TYPICAL TEST RESULT
SAE Grade			DEXRON III
Color	ASTM D 1500	-	RED
Kinematic Viscosity 104 F/ 40 C	ASTM D 7042	cST	TBR
kinematic viscosity 212 F/ 100 C	ASTM D 7042	cST	8.50
Viscosity Index (min)	ASTM D 2270	-	190
S.P gravity 60 C	ASTM D 4052	g/Cm <sup>3</sup>	0.8400
Flash Point (min)	ASTM D 92	C	200
pour point (max)	ASTM D 97	C	-42



Engine Oil & Lubricants

### AVAILABLE PACKAGING

Packing	Details
1 L	12x1 L carton
4 L	4x4 L carton
5 L	4x5 L carton
20 L	1x20 L gallon
Drum	1x200 L drum
	1x208 L drum





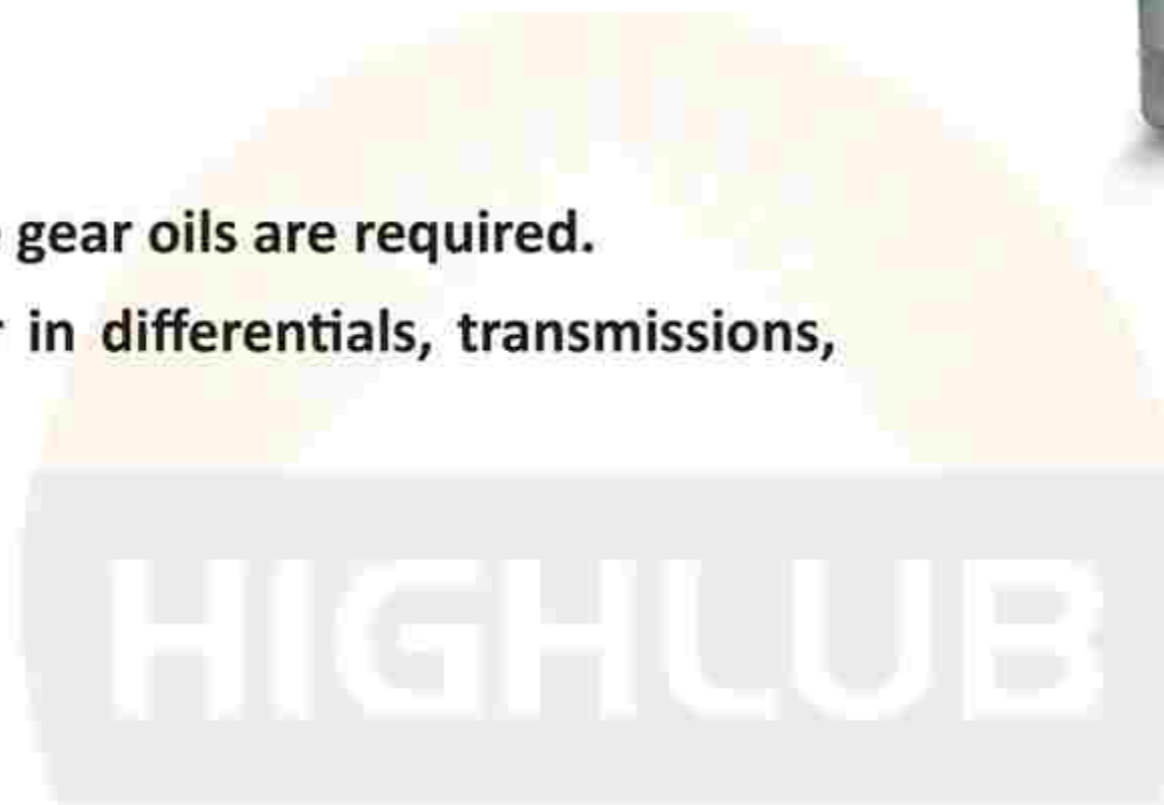
## GEAR OIL (API: GL- 5)

### Product Intorduction :

HIGHLUB Gear Oil API GL- 5 is a high performance lubricant that has excellent performance and load carrying ability, as well as providing rust and corrosion protection to transmission components. This grade not only has outstanding low temperature fluidity, eliminating cold start gear selection problems, but can also cope with highly stressed gearboxes running at high temperatures, where extreme pressure is applied.

### APPLICATIONS:

- Industrial gears sets where extreme pressure gear oils are required.
- Hypoid, helical, spiral-bevel and worm gear in differentials, transmissions,
- final drives and steering mechanisms.



### TYPICAL PROPERTIES

PARAMETERS	TEST METHOD	UNIT	TYPICAL TEST RESULT		
SAE Grade			75W - 90	85W - 90	85W - 140
Color	ASTM D 1500	-	L 3.0	L 3.0	L 3.0
Kinematic Viscosity 104 F/ 40 C	ASTM D 7042	cST	TBR	TBR	TBR
kinematic viscosity 212 F/ 100 C	ASTM D 7042	cST	16.5	18.0	29.0
Viscosity Index (min)	ASTM D 2270	-	140	120	120
S.P gravity 60 C	ASTM D 4052	g/Cm <sup>3</sup>	0.8600	0.8900	0.8900
Flash Point (min)	ASTM D 92	C	210	230	230
pour point (max)	ASTM D 97	C	- 40	- 27	- 21
TAN	ASTM D 664	Mg k · H/gr	1.50	1.50	1.50



**CALCIUM GREASE****Product Introduction :**

HIGHLUB Calcium Grease is a proven performer, thickened by calcium hydroxide with mineral oil. This product has excellent water resistant property, mechanical stability and lubricating performance. It has a smooth and buttery texture.

**APPLICATIONS:**

Suitable for the lubrication of pivots, joints, springs, Can be used as maintenance grease, It is intended for all Automotive Application including chassis points, king pins, die pins.

It is also used in typical Industrial Construction and Agricultural equipments.

**TYPICAL PROPERTIES**

PARAMETERS	TEST METHOD	UNIT	TYPICAL TEST RESULT	
NLGI GRADE	-	-	2	3
PENERATION . WORKED	ASTM D 217	0.1 MM	265 - 295	220 - 250
DROPPING POINT	ASTM D 566	°C	95	95
WATER RESISTANCE	-	-	VERY GOOD	VERY GOOD
COLOR	ASTM D 1743	-	PASS	PASS
STRUCTURE	-	-	NATURAL	NATURAL
TEMPERATURE RANGE	-	-	SMOOTH	SMOOTH
-	-	-	- 10CTO + 100 C	- 10CTO + 100 C
-	-	-	-	-

Engine Oil & Lubricants

**AVAILABLE PACKAGING**

Packing	Details
1 LB	24x1LB carton
2 LB	12x2LB carton
32 LB	1x32 LB pail
400 LB	1x400 LB drum



**LITHIUM GREASE****Product Introduction :**

HIGHLUB lithium soap based greases are premium-quality products suitable for high-temperature service in rolling-element bearings. These versatile greases can be used in a wide range of industrial applications and are particularly recommended for bearing lubrication. HIGHLUB lithium grease is a high performance; multipurpose lithium soap based grease developed using an optimized combination of high quality mineral oil, proprietary thickener technology and an especially selected additive system enabling reliable performance across a wide range of temperatures whilst exposed to a variety of operational loads, speeds and environmental conditions.

**APPLICATIONS:**

Due to its outstanding oxidation stability and resistance to softening at high temperatures, HIGHLUB Lithium greases may be used in many applications such as oven-conveyor bearings, dryer-roller bearings, induced-draft fan bearings, and equipment adjacent to high radiant heat such as ovens, etc. This grease is intended for use in a wide range of plain and rolling element bearings within the Automotive, Industrial, Marine and Energy Industries, especially targeting those applications where upper operating temperatures are likely to exceed the limits of conventional, lithium thickened greases.

**TYPICAL PROPERTIES**

PARAMETERS	TEST METHOD	UNIT	TYPICAL TEST RESULT			
GRADE			MP 2	MP 3	EP 2	EP 3
PENETRATION , WORKED 25 °C	ASTM D 217	°C	265-295	220-250	265-295	220-250
APPEARANCE	VISUAL	-	smooth	smooth	smooth	smooth
DROPPING POINT (min)	ASTM D 566	°C	180	190	180	190
THICKENER	-	-	lithium soap	lithium soap	lithium soap	lithium soap
WATER RESISTANCE	-	-	very good	very good	very good	very good
BASE OIL TYPE	-	-	mineral	mineral	mineral	mineral
COLOR	-	-	yellowish brown	yellowish brown	yellowish brown	yellowish brown
TEMPERATURE RANGE	-	-	-30 C + 140C	-30 C + 140C	-30 C + 140C	-30 C + 140C

**AVAILABLE PACKAGING**

Packing	Details
1 LB	24x1LB carton
2 LB	12x4LB carton
32 LB	1x32 LB pail
400 LB	1x400 LB drum





## ANTIFREEZE/ COOLANT

### Product Introduction :

HIGHLUB engine antifreeze/coolant is designed for both petrol and diesel engines. It is specially formulated as mixture of mono-ethylene glycol and selected additive package to provide outstanding all round protection. HIGHLUB offers both ready to use and concentrate coolant/antifreeze.

### Filling Instruction :

HIGHLUB antifreeze Concentrate should be diluted with clean water (preferably de mineralized) to a concentration of between %30 that ensures satisfactory protection against corrosion for light vehicles and %50 which is the recommended concentration to achieve the best degree of protection performance for larger diesel engines. In a clean cooling system, our products will deliver optimum performance and protection for up to one year upon which the system should be drained and refilled with Coolant again.

Engine Oil & Lubricants

### TYPICAL PROPERTIES

PARAMETERS	TEST METHOD	UNIT	TYPICAL TEST RESULT	
Concentration			50 %	100 %
Destiny 15°C	ASTM D 1298	g/cm <sup>3</sup>	1.065	1.13
pH	ASTM D 1121	-	8.5	9.2
Reflux Boiling Point C	ASTM D 1120	-	107	197
Freezing Point C	ASTM D 1117	-	- 36	- 12



### AVAILABLE PACKAGING

Packing	Details
1 L	12x1 L carton
4 L	4x4 L carton
5 L	4x5 L carton
20 L	1x20 L gallon
25 L	1x25 L gallon



## Bitumen (Penetration Grade)

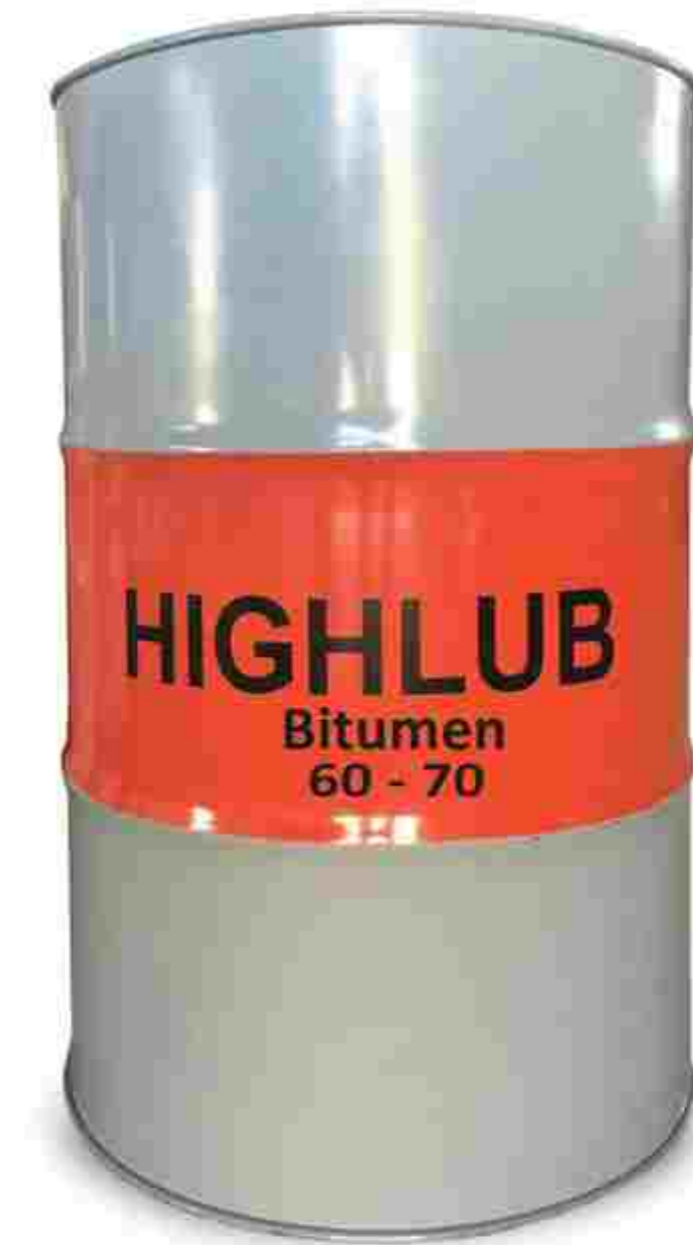
### Product Introduction :

Penetration-grade bitumen is mainly used in road surfacing. Bitumen with lower penetration grade is used in the regions with warm climate while higher penetration grade is used in colder weather.

HIGHLUB is capable of OFFERING different grades of road surfacing bitumen.

### AVAILABLE PACKAGING

Packing	Details
40 KG	Plastic Bag
180 KG	New Steel Drum



### TYPICAL PROPERTIES

Test	Methodology	30-40	40-50	60-70	85-100	100-120
Dentisy	ASTM D 7	1/01-1/06	1/01-1/06	1/01-1/06	1-1/ 0 5	1/01-1/04
Peneration rate at 25°C	ASTM D 5	30-40	40-50	60-70	85-100	100-120
softening point °C	ASTM D 36	55-63	52-60	49-56	45-52	42-49
ductility at 25 C (cm)	ASTM D 113	100 min	100 min	100 min	100 min	100 min
flash point °C	ASTM D 92	250 min	250 min	250 min	250 min	250 min
Solubility in Disulfide % Wt	ASTM D 4	99/5	99/5	99/5	99/5	99/5
Satin test	AASHTO T109	Negative	Negative	Negative	Negative	Negative
Weight loss by heating %wt	ASTM D 6	0/2 max	0/2 max	0/2 max	0/2 max	0/2 max
Penetration Loss by heating %	ASTM D- 6 D- 5	20 max	20 max	20 max	20 max	20 max





ENGINE OIL & LUBRICANTS

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