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UGL

United Grease & Lubricants Co. LLC was established in the year 1996. The current facility has the capacity to blend & fill 200,000 MT of finished lubricants and 6000 MT of lithium & calcium greases per annum.

United Grease & Lubricants Co. LLC is an ISO 9001:2015 approved facility and also carries the Emirates Quality Mark which complies with GCC 1785:2007 Lubricants Standards. Our Lab has been assessed and registered by GAC in compliance with the requirements of ISO 17025:2017 standards. Being an environmentally responsible production entity, our business activities are in compliance with Environmental & Safety Management System - ISO 14001:2015 & OHSAS 18001:2017.

SCOPE LUBRICANTS

In order to ensure stringent quality control of Scope Lubricants, the laboratory is equipped with the latest equipments and versatile facilities to carry out comprehensive testing and quality control requirements of lubricants, greases and related products.

This product guide provides a brief and convenient reference on Scope Lubricants & Greases available. It covers the general descriptions, features and user benefits, recommended applications and typical properties of our products. Detailed Specifications, Product Data Sheets (PDS) and Material Safety Data Sheets (MSDS) are available on request for each grade providing more product information and / or at www.scopelubricant.com

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e-PEGASO

Fully Synthetic Hybrid Motor Oil - API SP GF-6A

e-Pegaso Hybrid GF-6A 0W/20 is a synthetic superior performance passenger car engine oil for hybrid cars. This lubricant provides fuel economy up to 2.9% and extended drain intervals. It ensures best-in-class engine cleanliness which increases durability of the engine. It is fully compatible with biofuels.

Main Benefits

- Improved Fuel Economy
- Exceptional engine protection after cold starting.
- Superior oil film strength preventing engine wear.
- Superior oxidation stability
- Best-in-class wear prevention ensuring long engine life.

Specification & Performance Standards

API SP, Resource Conserving, ILSAC GF-6A

Typical Physical Characteristics

SAE Viscosity Grades	0W/20
Density @ °C	0.848
Viscosity at 40°C, cSt	42
Viscosity at 100 °C, cSt	8.1
Viscosity Index	171
Flash Point, COC, °C	210
Pour Point, °C	-46
Sulfated Ash, %	0.9

SCOPE LUBRICANTS

e-MERCUR

Fully Synthetic Hybrid/EV Automatic Transmission Fluid

Scope e-Mercur is a fully synthetic hybrid/EV Automatic Transmission Fluid with extended drain intervals. It delivers outstanding resistance against wear and extends transmission life and excellent oxidation and thermal stability as well as improved frictional performance and shear stability. It also offers improved fuel economy and provides immediate lubrication after cold start and protects with outstanding elastomer compatibility.

Applications

Scope e-Mercur can be used in E-vehicles requiring low viscosity ATF Lubricants. It meets the specification of many OEMs and is backward compatible with IEC 60296, DX VI / Mercon® LV, JASO 1A-LV13 applications.

Main Benefits

- Extends equipment life.
- Optimal friction characteristics even at low temperatures
- Improved shear stability for a stable viscosity during use
- Excellent oxidation and thermal stability
- Full synthetic formulation to provide an extreme thermal stability.

Specification & Performance Standards

GM Dexron® VI, Ford, Mercedes, Toyota, Volvo, Honda

Typical Physical Characteristics

Property	Unit	Test Method	Typical Value
Color		Visual	Varies
Density @ 15°C	Kg/m3	ASTM D 4052	844
Kin. Viscosity at 40°C	mm2/s	ASTM D 7042	27.2
Kin. Viscosity at 100 °C	mm2/s	ASTM D 7042	5.7
Viscosity Index	Index	ASTM D 2270	160
Flash Point, COC	°C	ASTM D 92	>200
Pour Point	°C	ASTM D 7346	-48

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e-FREEZO

Synthetic Hybrid/EV Thermal Management Fluid

Scope e-Freezo is a superior OAT Fluid that protects against freezing, boiling and corrosion of the cooling system. The thermal management fluids is a cooling liquid that keeps the engine/batteries always cool. The long life of the e-Freezo coolant is obtained by a non-depleting corrosion inhibitor.

Applications

For all e-vehicles–passenger cars, vans and heavy-duty applications where the Thermal Management Fluids required to cool the engine/battery.

Main Benefits

- Excellent service life due to chemical stability
- Outstanding high temperature performance
- All season-type engine coolant
- Superb corrosion protection of coolant system metal compositions.
- Increase lifetime of cooling water pump

Specification & Performance Standards

ASTM D 3306/4656/4985/6210; JIS K 2234 and SAE J 1034.

Typical Physical Characteristics

SAE Viscosity Grades	N/A
Density @ °C	1.057
Freezing Protection at 50-50%	-38
Color	Orange-red
Break time at 25°C	5 Sec

Warning

Do not use 100% coolant in radiators. Always mix with water (Coolant 66% max + Water 34% max)

SCOPE LUBRICANTS

PEGASO 10000

Fully Synthetic Gasoline Engine Oil - API SP

Pegaso 10000 series of oils are high-performance fuel conserving engine oil based on 100% synthetic technology for all gasoline engines in passenger cars and light vans. They are specially designed for lubricating oil the latest generation vehicles like hybrid and ECO models which require low viscosity grades and running on gasoline and/or ethanol-containing fuels upto E 85.

Main Benefits

They are based on synthetic base oil in combination with a special additive package to obtain the following benefits:

- Excellent thermal and oxidation stability
- Long oil change interval
- Fuel saving properties due to low friction properties
- Excellent cold temperature properties for a smooth cold start

Specification & Performance Standards

Pegaso 10000 meets the following performance criteria:
ANP SP; API SN+Resource Conserving; ILSAC GF 6A (GF 6B for 0W-16); Dexos1™ Gen 3; GM 4718M

Typical Physical Characteristics

Property	Unit	Test Method	Typical Value				
SAE Grade		SAE J 300	0W-16	0W-20	5W20	5W30	5W/40
Density @ 15°C	Kg/m^3	D 4052	846	848	847	852	852
Kin. Viscosity at 40 °C	mm^2/s	D 7042	39.3	45.4	42	67	80
Kin. Viscosity at 100 °C	mm^2/s	D 7042	7.5	8.7	8.2	11.7	14
Viscosity Index	Units	D 2270	161	173	172	173	182
Flash Point, COC	°C	D 92	>200	>200	>200	>200	>210
Pour Point	°C	D 7346	-42	-42	-42	-42	-39
Total Base Number	Mg KOH/gm	D 2896	8.2	8.3	8.3	8.3	8.3

SCOPE LUBRICANTS

PEGASO 9050

Fully Synthetic Gasoline Engine Oil - API SN

SCOPE Pegaso SN has been formulated for latest on-road, high-performance and inter-cooled direct injection high performance gasoline engines normal SAPS passenger car portfolio .It provides outstanding protection against engine wear under high-temperature and high engine speed conditions. It is blended from synthetic base components, highly shear stable viscosity modifiers and premium tier additive packages. Suitable for ACEA 2012 normal SAPS requirements formulations.

Main Benefits

- Excellent oxidation resistance
- Excellent low temperature flow characteristics
- Excellent detergency and high dispersancy
- Keeps engine clean under all conditions
- Exceptional thermal stability
- Low oil consumption
- Protects against rust and corrosion.

Applications

SCOPE Pegaso SN is recommended for various types of modern vehicles where it will help provide unsurpassed performance even under very demanding driving conditions. It is recommended for latest engine technologies including direct injection, diesels (without DPF) and hybrids.

Specification & Performance Standards

API SN/CF, ACEA A3/B4-2012 A3/B3, Mercedes Benz 229.3 & 229.5., JASO MA-2, VOLKSWAGEN 502/505, Porsche A40, Opel GM-LL-A/B-025, Renault 0700/0710

Typical Physical Characteristics

Test	Test Method	SN	
SAE Viscosity Grades	-	**5W/30**	**5W/40**
Density @ 15°C, Kg/ltr	D-4052	0.852	0.852
Kinematic Viscosity @40°C cSt	D-445	62.0	80.0
@100°C cSt	D-445	11.0	14.0
Viscosity Index	D-2270	171	182
TBN,mg KOH/gm	D-2896	10.0	10.0
Pour Point, °C	D-97	-39	-39
Flash Point, °C	D-92	224	222
Sulphated Ash % wt	D-874	1.2	1.2
Foam Vol Tend/Sta Seq I,SeqII,Seq III	D-892	0/0,0/0,0/0	0/0,0/0,0/0
Apparent viscosity by CCS,cP	D-5293	6100 @ -30°C	6200 @ -30°C

SCOPE LUBRICANTS

PEGASO 9000

Fully Synthetic Gasoline Engine Oil - API SM/CF

Scope Pegaso SM/CF is a unique fully synthetic lubricant for ultimate engine protection and performance. It is a multi grade motor oil specially formulated with selected synthetic base fluids and race proven additive technology for use in passenger cars and light truck gasoline engines and diesel engines under all operating conditions.

Main Benefits

- Ultimate protection in all driving conditions.
- Rapid oil flow and low friction effectively contributes towards reducing fuel consumption.
- Meets environmental requirements.

Applications

Scope Pegaso SM/CF fully synthetic oil can be used for all naturally aspirated, fuel injected, turbo charged and multivalve passenger car engines.

Specification & Performance Standards

Scope Pegaso fully synthetic oil exceeds the requirements of all major car manufacturers and the following standards. API SM/CF, VW – 500.00, 502.00, 505.00, BMW - Long Life 98, Mercedes Benz – Sheet 229.3, Porsche "GL"

Typical Physical Characteristics

SAE Viscosity Grade	5W/30	5W/40	5W/50
Vis @ 100°C	11.50	14.50	17.00
Viscosity Index	165	178	195
Pour Point, °C	-45	-45	-42
Flash Point COC, °C	220	220	220
TBN,mg KOH/gm	10	10	10
Apparent Viscosity – Cp	4300 @ -30°C	4500 @ -30°C	4700 @ -30°C

SCOPE LUBRICANTS

LUMIX 10000

Synthetic Gasoline Engine Oil - API SP

Scope Lumix 10,000 is a premium quality, synthetic, engine oil for use in a wide range of modern motor vehicles. It is formulated using high performance base oils with advanced engine oil additive technology including a FULL ZINC anti-wear package for complete engine protection with outstanding fuel economy.

Main Benefits

- Complete engine protection.
- Full Zinc anti-wear additive package for complete engine wear protection.
- Maximum wear protection & minimum sludge formation.
- Reduced piston deposits.
- Enhanced LSPI (Low Speed Pre-ignition) Protection.
- Better wear protection for "idle stop" engines.
- Reduced turbo charger deposits.
- Improved oxidation and deposit control and aeration.
- Catalyst and oxygen sensor friendly.
- Petrol & diesel compatible engine oil.

Specification & Performance Standards

Scope Lumix 10,000 meets API SP and ACEA A3/B4 specifications for quality and assurance.

Typical Physical Characteristics

SAE Viscosity Grade	10W/40
Density at 15°C, kg/L	0.861
Viscosity, Kinematic, cSt at 40°C	91
Viscosity, Kinematic, cSt at 100°C	13.7
Viscosity Index	153
Cold Cranking Viscosity, cP at -25°C	6,600
Total Base Number (TBN)	13.4

SCOPE LUBRICANTS

PERFO 9050

Premium Grade Gasoline Engine Oil - API SN

SCOPE Perfo 9050 SN is a highly shear-stable, multi grade gasoline engine oil for use in passenger cars and light truck engines requiring API SN or lower performance lubricants under all operating conditions. It is formulated with highly refined base stocks and selected DI Packages which provides excellent wear control. High thermal stability and oxidation resistance provides excellent protection against in-service oil degradation that contributes to filter blocking and sludge formation in the oil galleries, crankcase and valve train.

Main Benefits

- Enhanced fuel economy
- Improved engine cleanliness and reduced oil consumption
- Excellent high and low-temperature performance
- Effective corrosion inhibitors protect against rust and corrosion
- Proven protection against sludge and harmful deposits

Applications

- Naturally aspirated and turbocharged gasoline engines in passenger cars.
- Light truck gasoline engines.
- Four-stroke gasoline engines in portable power equipment where the manufacturer recommends conventional passenger car motor oils.

Specification & Performance Standards

Scope Perfo 9050 SN exceeds the requirements of all major car manufacturers and the following standards. API SN, VW – 500.00, 502.00, 505.00, BMW - Long Life 98, Mercedes Benz – Sheet 229.3, Porsche "GL"

Typical Physical Characteristics

SAE Viscosity Grade	10W/30	10W/40	15W/40	20W/40	20W/50
Viscosity, cSt @100°C	11.50	14.50	15.00	15.00	18.50
Viscosity Index	140	147	138	115	127
Pour Point, °C	-33	-33	-30	-27	-27
Flash Point COC, °C	216	216	220	230	230
TBN, mg KOH/gm ASTM D 2896	7.5	7.5	7.5	7.5	7.5
Apparent Viscosity – Cp	6400 @ -25°C	6600 @ -25°C	6000 @ -20°C	7600 @ -15°C	7800 @ -15°C

SCOPE LUBRICANTS

PERFO 9000

Premium Grade Gasoline Engine Oil - API SM

SCOPE Perfo 9000 is highest quality mineral based lubricant meeting the latest engine oil specifications of API SM. This product meets the severe demands of the New Seq III G test which requires a significant boost in oxidation performance at TEOST MHT4 tests and serves as a clear API SM capability.

Main Benefits

- Excellent oxidation stability.
- Excellent engine protection in severe weather conditions.
- Longer drain interval.
- Low oil consumption and turbo proven stability.

Applications

SCOPE Perfo 9000 is used in all naturally aspirated, fuel injected turbo charged and multivalve passenger cars, light duty vehicles etc.

Specification & Performance Standards

SCOPE Perfo 9000 meets and exceeds the requirements of API SM and meets the following OEM's standards: General Motors GM 6094M, Chrysler MS 6395.N, Mercedes Benz Sheet 229.3, ACEA E7 – 97, Volvo VDS3, MTU Type 2 & Detroit Diesel specifications.

Typical Physical Characteristics

SAE Viscosity Grade	10W/30	10W/40	15W/40	20W/40	20W/50
Viscosity, cSt @100°C	11.50	14.50	15.00	15.00	18.50
Viscosity Index	140	147	138	115	127
Pour Point, °C	-33	-33	-30	-27	-27
Flash Point COC, °C	216	216	220	230	230
TBN, mg KOH/gm ASTM D 2896	7.0	7.0	7.0	7.0	7.0
Apparent Viscosity – Cp	6400 @ -25°C	6600 @ -25°C	6000 @ -20°C	7600 @ -15°C	7800 @ -15°C

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PERFO 8000

Premium Grade Gasoline Engine Oil - API SL/CF

SCOPE Perfo 8000 SL/CF, high performance engine oils are manufactured for all gasoline and diesel powered passenger cars, light trucks and van including those fitted with turbo chargers. Originated with highly refined base stock and efficient additive technology to maintain engine oil cleanliness, wear and very good low temperature fluidity ensure easy starting in cold weather and low volatility contributes to low oil consumption.

Main Benefits

- Fuel economy and better cold starting.
- Excellent engine protection in severe weather conditions.
- Thermal stable, Anti-wear, Anti-oxidant and long drain interval.
- Low oil consumption and turbo proven stability.
- Longer drain interval.
- Low oil consumption.

Applications

SCOPE Perfo 8000 SL/CF oil is recommended in severe operating condition where high performance oil is required.

Specification & Performance Standards

SCOPE Perfo 8000 SL/CF meets and exceeds the requirements of API SL/CF and can be used in all types of cars and light duty trucks. The product also meets ACEA E2-96, ACEA A3-98/B3-98, B4-02, MB 229.1, MAN 270/271, VOLVO VDS, MACK EO-L, MTU/DDU TYPE-1 and ALLISON – C4.

Typical Physical Characteristics

SAE Viscosity Grade	10W/40	15W/40	20W/40	20W/50	40	50
Viscosity, cSt @100°C	14.50	15.00	15	18.50	15	19
Viscosity Index	147	138	114	126	97	97
Pour Point, °C	-33	-30	-24	-24	-15	-12
Flash Point COC, °C	216	220	230	230	248	258
TBN, mg KOH/gm ASTM D 2896	7.5	7.5	7.5	7.5	7.5	7.5
Apparent Viscosity - Cp @°C	6500 @ -25°C	6300 @ -25°C	7700 @ -15°C	7800 @ -15°C	-	-

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PERFO 7000

Premium Grade Gasoline Engine Oil - API SJ/CF

SCOPE Perfo 7000 SJ/CF, engine oils are manufactured for modern gasoline and diesel engines. It is a superior quality lubricant formulated with highly refined base stock and advanced additive technology meeting the requirement of API SJ/CF classification for gasoline engines.

Main Benefits

- Engine protection against wear and sludge.
- Engine cleanliness and low combustion residue.
- Fuel economy and better cold starting.
- Oxidation resistant, good high temperature stability.
- Longer drain interval.
- Low oil consumption.

Applications

SCOPE Perfo 7000 SJ/CF engine oil is compatible with most naturally aspirated or turbo charged diesel engines in passenger cars maintaining excellent level of protection. It also offers performance advantage over older types of lubricant.

Specification & Performance Standards

SCOPE Perfo 7000 SJ/CF engine oil meets and exceeds the requirements of API SJ/CF and can be used in all types of cars and light duty trucks of gasoline and diesel engines. The product also meets ACEA A3/B3, MB 229.1, VW 500/505, Porsche and BMW.

Typical Physical Characteristics

SAE Viscosity Grade	10W/40	15W/40	20W/40	20W/50	40	50
Viscosity, cSt @100°C	14.50	14.80	14.80	18.50	15	19
Viscosity Index	146	136	115	125	95	95
Pour Point, °C	-33	-27	-24	-24	-15	-12
Flash Point COC, °C	216	220	230	230	250	260
TBN, mg KOH/gm ASTM D 2896	7.0	7.0	7.0	7.0	7.0	7.0
Apparent Viscosity – Cp @ °C	6600 @ -25°C	6400 @ -20°C	7600 @ -15°C	7800 @ -15°C	-	-

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PERFO 4T

Four Stroke Engine Oil

SCOPE Perfo 4T engine oils are blended with high performance base stocks and precisely balanced additives to provide high clutch frictional performance, outstanding engine cleanliness and excellent wear protection at high temperatures. This specially designed motorcycle engine oil helps to deliver unsurpassed performance under severe operating conditions in all Seasons, driving environments, from mild to severe, and on the race tracks.

Main Benefits

- Optimized frictional properties
- Exceptional wear protection
- Outstanding thermal and oxidation stability
- Outstanding engine cleanliness, smooth and reliable operation
- Long life of critical valve train and bearing components

Applications

SCOPE Perfo 4T engine oil is recommended for the lubrication of four-stroke motorcycle engines of all Japanese, European and other manufacturers.

Specifications

SCOPE Perfo 4T engine oil meets and exceeds the requirements of API SJ/CF, JASO MA, MA2 and can be used in all types of cars and light duty trucks of gasoline engines.

Typical Physical Characteristics

SAE Viscosity Grade	20W/50	10W/40	10W/30	20W/40
Viscosity, cSt @ 100°C	18.30	14.5	11.0	11.0
Viscosity Index	125	155	145	145
Pour Point, °C	-24	-36	-36	-24
Flash Point COC, °C	230	226	220	220

SCOPE LUBRICANTS

METRIC 10000

Fully Synthetic Diesel Engine Oil - API CK-4

SCOPE Metric CK-4 Diesel Engine Oil is formulated with hydro-treated base stocks and a tailored additive package that helps extend engine life. The proprietary formulation delivers excellent wear protection, outstanding oxidation stability, and outstanding TBN retention with long oil drain intervals. SCOPE Metric CK-4 oils also provides outstanding resistance to oil consumption, oxidation, corrosive and abrasive wear, and high temperature deposits.

Main Benefits

- Greater engine efficiency, longer engine life and oil life.
- Excellent oil consumption control / Excellent soot and viscosity control.
- Corrosion protection and extended drain intervals for both new and old engines.
- Outstanding oxidation stability / Outstanding TBN reserves.

Applications

Specifically engineered for engines operating under severe service in a wide range of climatic conditions and ambient temperatures. An ideal mixed fleet engine oil designed for naturally aspirated and turbocharged heavy-duty diesel engines in mobile and stationary equipment where the API CK-4 service category is specified.

Specification & Performance Standards

This low ash formulation meets API CK-4, CJ-4 requirements. SAE 10W30 grade also meets API FA-4 requirements. Further this family meets requirements of Ford WSS-M2C17-F1, Cummins CES 20086/87, DDC 93K 222/223, MAK EOS-4.5, Volvo VDS-4.5, Renault RLD-3, ACEA E7/E11-22, Mercedes Benz 228.5, MAN 3275/3575, Duetz DQC 1III-18 LA and Allison TES 439.

Typical Physical Characteristics

SAE Viscosity Grades	10W/30	10W/40	15W/40
Viscosity, cSt @ 40°C	73	100	112
Viscosity, cST @ 100°C	11.5	14.8	15.0
Viscosity Index	154	154	139
Pour Point, °C	-33	-33	-39
Flash Point COC, °C	216	220	230
TBN, mg KOH/gm ASTM D 2896	10.0	10.0	10.0
Apparent Viscosity- Cp	6000 @ -25°C	6100 @ -25°C	6100 @ -20°C

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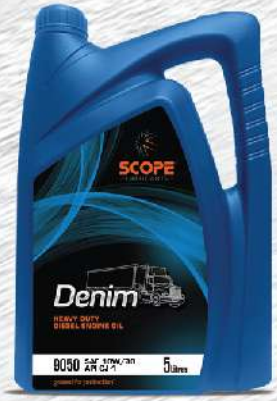
DENIM 9050

Heavy Duty Diesel Engine Oil - API CJ-4

SCOPE Denim 9050 Diesel Engine Oil is the latest highest quality in Diesel Engine Oil meeting the API CJ-4 Standards. It is designed for high speed, four stroke engines designed to meet exhaust emission standards, CJ-4 oils are compounded for use in all applications with diesel fuels ranging in sulfur content up to 500 ppm. It is effective at sustaining emission control system durability and oil drain intervals.



Main Benefits

- Meets exhaust emission standards
- Long oil drain intervals
- Excellent control on particulate filter blocking engine wear, piston deposits
- Excellent low and high temperature stability
- Excellent oxidation and foam control
- Excellent control on viscosity loss due to shear

Applications

Scope Denim 9050 Diesel Engine Oil can be used for all latest highly rated turbo charged 4 stroke diesel engines under all operating conditions when sulfur content up to 500 ppm.

Specification & Performance Standards

SCOPE Denim 9050 Diesel Engine Oil meets and exceeds API CJ-4, API CI-4 with CI-4 Plus, CH-4, CG-4 and CF-4. ACEA – E7, E5. Cummins CE5 20078, 71, 76, 77. Mercedes Benz: 228.3, MAN 3275 Volvo – VDS3, Scania – LDF , Mack Truck: EOM +, DAF ACEA E3

Typical Physical Characteristics

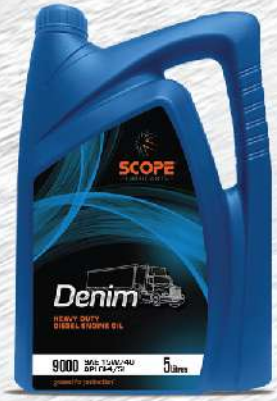
SAE Viscosity Grades	10W/30	10W/40	15W/40
Viscosity, cSt @ 40ºC	73	100	125
Viscosity, cST @ 100ºC	11.5	14.8	15
Viscosity Index	141	136	123
Pour Point, °C	-36	-36	-36
Flash Point COC, ºC	216	218	220
TBN, mg KOH/gm ASTM D 2896	9.5	9.5	9.5
Apparent Viscosity- Cp	6000 @ -25ºC	6000 @ -25ºC	6000 @ -20ºC

SCOPE LUBRICANTS

DENIM 9000

Heavy Duty Diesel Engine Oil - API CI-4/SL

SCOPE Denim 9000 lubricant has been formulated with highly refined base oil and advanced additive technology to achieve latest low emission and high performance requirements of US, European and Japanese engine makers. It provides protection against oil thickening, high temperature, sludge build up, oil degradation and corrosion. It provides good shear stability.



Main Benefits

- Advance additive technology provides wear protection and longer oil life.
- Improved engine cleanliness and protection against piston deposits.
- Excellent performance in heavy duty operation.
- Superior oxidation resistance, soot control and thermal stability.
- Easy cold starting and longer drain interval.

Applications

SCOPE Denim 9000 is recommended to be used in on and off high way diesel engines.

Specification & Performance Standards

SCOPE Denim 9000 meets and exceeds the requirement of API CI-4 / CH-4 / CG-4 / CF-4 / CF / SL / SJ, Mercedes Benz 228.5 / 229.1, Allison C-4, ACEA E7 / A3 / B3, JASO DH-1, Global DHD-1, Cummins CES 20078, CES 20077, CES 20076, MAN 3275, VOLVO VDS3, MTU-Type 2, CAT ECF1, Renault RLD 2, MAK EO-N, Duetz DQC III- 18 and DDC 93K 215.

Typical Physical Characteristics

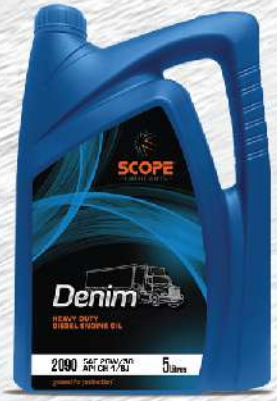
SAE Viscosity Grades	10W/30	10W/40	15W/40	20W/50
Viscosity, cSt @ 100°C	11.5	14.50	15.00	18.50
Viscosity Index	147	147	140	128
Pour Point, °C	-36	-36	-30	-27
Flash Point COC, °C	210	212	220	232
TBN, mg KOH/gm ASTM D 2896	11.00	11.00	11.00	11.00
Apparent Viscosity - Cp	6500 @ -25°C	6500 @ -25°C	6200 @ -20°C	7800 @ -15°C

SCOPE LUBRICANTS

DENIM 2090

Heavy Duty Diesel Engine Oil - API CH-4/SJ

SCOPE Denim 2090 is superior quality long drain multi grade oil, formulated with highly refined base stock and selective additive package. Scope Denim 2090 is severe-duty engine oil formulated specially for high speed four stroke diesel engines designed to meet 1999 way exhaust emission standards and also suitable for a wide range of heavy duty off-highway applications.



Main Benefits

- Superior protection against thermal break down at high temperature.
- Lower exhaust emission.
- Excellent performance in heavy duty operations.
- Superior oxidation & thermal stability.
- Longer drain interval and prolong engine life.

Applications

SCOPE Denim 2090 can be used in latest low emission and high performance engines of road transport, construction and other industries where diesel fuel sulfur should not exceed above 0.50% weight.

Specification & Performance Standards

SCOPE Denim 2090 meets and exceeds the requirement of API CH-4/CG-4/CF-4, ACEA: E3, E5/ E7, MB-228.3, Scania E3, MAN 271, Volvo VDS-2, GM Allison C-4, Cummins CES 20071, 20072, 20075

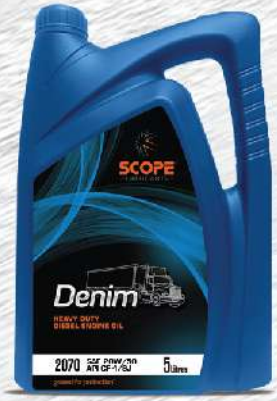
Typical Physical Characteristics

SAE Viscosity Grades	10W/40	15W/40	20W/50	30
Viscosity, cSt @ 100°C	14.50	15.00	18.50	11.50
Viscosity Index	150	140	127	110
Pour Point, °C	-33	-30	-27	-15
Flash Point COC, °C	212	220	232	110
TBN, mg KOH/gm ASTM D 2896	10.0	10.0	10.0	10.0
Apparent Viscosity- Cp	6500 @ -25°C	6000 @ -20°C	7800 @ -15°C	N/A

DENIM 2070

Heavy Duty Diesel Engine Oil - API CF-4/SJ

SCOPE Denim 2070 is a very high performance diesel engine lubricant. It is a multi grade oil of API CF-4/SJ level for use in almost all kind of turbo charged heavy duty diesel engines. It is a blend of superior quality base stocks and additives. In addition to it's high level of detergency and dispersancy. It has a stable viscosity index improver that does not shear off under severe operating conditions of high load at high temperatures.



Main Benefits

- Provides longer engine life
- Longer drain period
- Low temperature fluidity, low oil consumption
- Fuel economy and superior wear control of engine parts
- Controls piston deposits, engine cleanliness
- High resistance to oxidation & thermal degradation

Applications

SCOPE Denim 2070 oils can be used under normal conditions for mixed fleet of diesel and gasoline engines. It can also be used as C4 transmission fluid in Allison transmission and in Caterpillar Transmission.

Specification & Performance Standards

SCOPE Denim 2070 meets and exceeds the requirement of API CF4/SJ, MIL-L-2104E, MIL-L- 46152E, CCMC D4, G4, PD2, ACEA A2/B3/E2/02, MB 229.1, VOLVO VDS, MAN 271, MTU – TYPE 1, ALLISON C-4, CAT TO2/TO3

Typical Physical Characteristics

SAE Viscosity Grades	10W/40	15W/40	20W/50	40	50
Viscosity, cSt @ 100°C	14.50	14.70	18.50	15.00	19.00
Viscosity Index	148	137	125	96	96
Pour Point, °C	-33	-27	-24	-18	-15
Flash Point COC, °C	215	218	230	240	250
TBN, mg KOH/gm ASTM D 2896	10	10	10	10	10
Apparent Viscosity –Cp	6500 @ 25°C	6000 @ -20°C	7800 @ 15°C	N/A	N/A

SCOPE LUBRICANTS

EFFOL MP

Automotive Gear Oil - API GL-5

SCOPE Effol MP Gear Lubes blended with highly refined mineral base oil and selective additives for use in heavy duty operations are used in commercial fleet, manual transmission, axles and final drives. Protects from rust & corrosion and low temperature properties, gives good start in cold weather.

Main Benefits

- Excellent anti-wear and anti-rust characteristics.
- Resistance to oxidation and oil thickening.
- Maximize equipment life and assist smooth shifting in manual transmission.
- Outstanding performance against low speed/high torque wear and high speed scoring.
- Protects against corrosion of ferrous and non-ferrous components.
- Excellent load carrying capability in severe operating conditions.
- Compatible with all type of seals to avoid leakage.

Applications

SCOPE Effol MP Gear Lubricants are recommended for use in Hypoid gears, compatible with seal and gasket material used in automotive gears. Drive axle, trucks, and taxicabs, contracting and farming equipment.

Specification & Performance Standards

SCOPE Effol MP Gear Lubes meets API service categories GL-5 and U.S Military specification MIL-L-2105D

Typical Physical Characteristics

SAE Viscosity Grades	90	140	80W/90	85W/90	85W/140
Viscosity, cSt @ 100°C	17.00	30.00	14.60	17.00	29.00
Viscosity Index	95	95	101	100	98
Pour Point, °C	-18	-12	-27	-21	-21
Flash Point COC, °C	238	248	230	236	244

SCOPE
LUBRICANTS

EFFOL EP

Automotive Gear Oil - API GL-4

SCOPE Effol EP Gear Lubes are premium quality long life gear box oils blended with extreme pressure additives and these oils are environmentally friendly and contains neither lead nor chlorine. They offer good resistance to oxidation, staining, rusting, corrosion and foaming.

Main Benefits

- Outstanding protection against wear and rust.
- Longer drain interval and gear life.
- Good load carrying capability.
- Resistance to oxidation and oil thickening and are compatible to oil seals.
- Good low temperature performance.

Applications

SCOPE Effol EP Gear Lubricants are recommended for commercial vehicle's automotive and passenger car gear type transmission and drive axles operating up to 100°c, Hypoid gear, and contractor equipment and in worm gear final drives.

Specification & Performance Standards

SCOPE Effol EP Gear Lubes meets the performance requirements of API service GL-4 and U.S Military Specification MIL-L-2105C

Typical Physical Characteristics

SAE Viscosity Grades	90	140	80W/90	85W/90	85W/140
Viscosity, cSt @ 100°C	17.00	30.20	14.60	17.00	29.00
Viscosity Index	96	95	101	100	98
Pour Point, °C	-12	-9	-24	-18	-9
Flash Point COC, °C	244	256	240	246	250

SCOPE LUBRICANTS

MERCUR

Automatic Transmission Fluid - DX-VI

Scope Mercur DX-VI is a high-quality universal fluid based on 100% synthetic base stocks to be used in automatic transmission, torque converts and power steering of passenger cars, light vans, and commercial vehicles where a GM Dexron® VI specification is required. This product is backwards compatible where Dexron® III (H), III (G), II E and II D was required.

Main Benefits

Scope Mercur DX-VI formulation on highly refined synthetic base stocks in combination with a unique additive package to reach the following benefits:

- Excellent shifting at very low and high temperatures
- Low pout point and very high viscosity index
- Special friction modifiers control friction
- Excellent thermal and oxidation stability

Specification & Performance Standards

Mercur DX-VI meets the following performance criteria : DEXRON® VI

Typical Physical Characteristics

Property	Unit	Test Method	Typical Value
Color		Visual	Varies
Density @ 15°C	Kg/m3	ASTM D 4052	844
Kin. Viscosity at 40°C	mm2/s	ASTM D 7042	27.2
Kin. Viscosity at 100 °C	mm2/s	ASTM D 7042	5.7
Viscosity Index	Index	ASTM D 2270	160
Flash Point, COC	°C	ASTM D 92	>200
Pour Point	°C	ASTM D 7346	-48

Dexron® is a registered trade mark of General Motors Corporation.
Color varies for country to country.

SCOPE
LUBRICANTS

MERCUR

Automatic Transmission Fluid - DX-III

SCOPE MERCUR DX-III is a superior quality automatic transmission fluid meeting General Motors GM Dexron® III Specifications. It is a special fluid with highly improved performance over DEXRON® IID and DEXRON® IIE carefully formulated multifunctional power transmission fluid which satisfies the latest requirements of passenger cars and commercial vehicle automatics, it has the facility and oiliness suited to the requirements of modern automatic gear boxes. It has extremely low temperature fluidity.

Main Benefits

- Excellent shift fueling
- Extremely low temperature fluidity
- Shear stability & wear protection
- Maximum oil drain interval
- High temperature oxidation stability

Applications

SCOPE Mercur DX-III is recommended for use in automotive automatic transmissions, Hydraulic systems, power steering and certain manual transmissions.

Specification & Performance Standards

SCOPE Mercur DX-III meets and exceeds General Motors GM Dexron® III specifications, Ford M2C 138-CJ/166H, Allison C 4 specifications, CAT - TO2.

Typical Physical Characteristics

Test	Typical Reports
Color	Varies
Viscosity @ 40°C	34.0
Viscosity @ 100°C	7.1
Viscosity Index	178
Pour Point °C	-45
Flash Point COC °C	190
Brookfield mPs -40°C	18,000

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Color varies for country to country.

SCOPE
LUBRICANTS

MERCUR

Automatic Transmission Fluid - DX-II

SCOPE Mercur is a superior quality automatic transmission fluid formulated with high viscosity index base oils and selective additive package to obtain anti-wear, anti-oxidant, anti-foam properties and low temperature fluidity. It provides excellent protection against wear and their frictional properties gives consistent and smooth shift under a wide range of driving conditions.

Main Benefits

- Excellent anti-wear, anti-oxidant and anti-friction properties.
- Excellent low temperature fluidity, thermal and high shear stability.
- Provides smooth and trouble free operation of ATF.
- Good frictional properties gives smooth shift performance.
- Prompt circulation and effective lubrication at low temperature.

Applications

SCOPE Mercur DX-II is recommended for use in passenger cars and light trucks as well as power steering which requires Dexron® IID specification fluid. It can also be used in some hydraulic system farm equipment. It is compatible with seal material in transmission unit.

Specification & Performance Standards

SCOPE Mercur DX-II meets the performance criteria of GM Dexron® IID and Dexron® IIE, Mercedes Benz 236.7. ALLISON C3, GM 6137M, Caterpillar TO-2.

Typical Physical Characteristics

Test	Typical Reports
Color	Varies
Viscosity @ 100°C	6.5
Viscosity Index	170
Pour Point °C	-42
Flash Point COC °C	202
Brookfield mPs -40°C	30,000

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Color varies for country to country.

SCOPE LUBRICANTS

MERCUR CVT

Continuously Variable Transmission Fluid - CVT Fluid

SCOPE Mercur CVT Fluid is a premium quality synthetic based oil designed for today's technologically advanced continuously variable transmissions. It is formulated with synthetic premium base oils, long-life friction modifiers, unique anti-wear additives and shear stable viscosity modifiers for use in passenger cars with belt-driven continuously variable transmissions. It has been specifically engineered to have the unique frictional properties required for use in this type transmission.

Main Benefits

- Excellent steel-on-steel frictional engagement and torque transfer
- Excellent wet clutch performance, shifting and anti-shudder durability
- Superior high temperature protection to effectively resist oxidation
- Extended drain intervals due to improved oxidation resistance
- Excellent low-temperature fluidity for optimal performance in cold conditions
- Maximizes equipment life, by helping to protect against wear, corrosion, and deposit formation

Applications

SCOPE Mercur CVT Fluid is recommended for service fill use in the passenger car, push-belt and chain-driven continuously variable transmission applications where CVT fluids are recommended only. (except for CVTs that require gear oils, and toroidal CVTs).

*Always consult your owner's manual to check specifications for your particular vehicle

Typical Physical Characteristics

SAE Viscosity Grades	CVT
Viscosity, cSt @ 40°c	36.0
Viscosity, cST @ 100°c	7.5
Viscosity Index	182
Pour Point	-48
Flash Point COC	210
Apparent Viscosity- Cp	12000 @-40°C

SCOPE LUBRICANTS

MERCUR

Dual Clutch Transmission Fluid - DCT Fluid

Mercur DCT Fluid is a high performance full synthetic long-life fluid specially designed for use in the last generation wet DCT (Double Clutch Transmission) transmission of the VAG group and other various other manufacturers like Renault, BMW, Ford and PSA and are characterized for fast and sportive shifting.

Main Benefits

Mercur DCT Fluid is based on fully synthetic base fluids in combination with a unique package to ensure the following benefits:

- High shear stability
- High Viscosity Index
- Very high protection against wear, corrosion and foam
- Very low pour point, can be used in very cold temperatures

Specification & Performance Standards

Mercur DCT Fluid meets the following performance criteria:

BMW DCTF-1
BMW 6-speed DCT
BMW EU 83 22 2 148 578
BMW EU 83 22 2 148 579
BMW EU 83 22 0 440 214
BMW EU 83 22 2 147 477
BMW MTF LT-5
Chrysler 68044345 EA / GA
Chrysler Powershift 6-speed DCT-1
Ferrari TE DCT-3
Ford WSS-M2C936-A
Ford M2C200-D2 / XT-11-QDC
MB 236.21
Mitsubishi TC-SST
Mitsubishi SSTF-1 MZ320065
Porsche 000 043 207 29
Porsche 000 043 207 30
Porsche 999.917.067.00
Porsche 999.917.080.00/01
Porsche 999.917.090.00
PSA 9734.S2
Renault EDC
Volvo 1161838/1161839
VW G 052 182
VW G 052 529
VW TL 521 82
VW TL 525 29
ZF TE-ML 11

Typical Physical Characteristics

Property	Unit	Test Method	Typical Value
Color		Visual	Varies
Density @ 15°C	Kg/m3	ASTM D 4052	848
Kin. Viscosity at 40°C	mm2/s	ASTM D 7042	33.2
Kin. Viscosity at 100°C	mm2/s	ASTM D 7042	6.9
Viscosity Index	Unit	ASTM D 2270	178
Flash Point, COC	°C	ASTM D 92	>200
Pour Point	°C	ASTM D 7346	-45

Color varies for country to country.

SCOPE
LUBRICANTS

SUPER 5100

Heavy Duty Brake Fluid - DOT-5.1

Scope Super 5100 Brake Fluid is a premium quality, full synthetic, non-silicone, DOT 5.1 brake fluid designed for use in a wide range of brake and clutch applications. It can also be used in vehicles with ABS (Anti Brake Skid), AEB (Auto Emergency Braking) and ESP (Electronic Stability Program) systems.

Main Benefits

- Suitable where DOT 5.1 fluids are required and for ESP and AEB braking systems.
- Low viscosity (at -40ºC), suitable for faster fluid circulation in micro-valves of ABS systems.
- High boiling point 275ºC / 525ºF.
- High wet boiling point ensuring retention of stopping power over the life of the fluid.
- Compatible with DOT 3, DOT 4 & Super DOT 4 brake & clutch fluids.
- Compatible with all common brake systems & materials.

Applications

Scope Super 5100 Brake Fluid is recommended for re-fill or top-up of brake and clutch systems in passenger cars, 4WD's, motorcycles, light and heavy-duty commercial vehicles, mining, construction, agricultural and all other moving vehicle types that require a non-petroleum based brake & clutch hydraulic fluid.

Typical Physical Characteristics

Colour	varies
Density at 20°C, kg/L	1.067
Viscosity, Kinematic, cSt at -40°C	690
Viscosity, Kinematic, cSt at 100°C	2.04
Equilibrium Reflux Boiling Point (wet), (typical)	184°C
Equilibrium Reflux Boiling Point (dry), (typical)	274°C

Please Note:

- DO NOT mix this product with SILICONE DOT 5 or MINERAL type brake fluids.
- For vehicles that require mineral based products i.e. Citroen, Use SCOPE LHM Plus should be used.
- Silicone type assembly compounds should not be used in conjunction with this product.
- Avoid contact with skin, varnish & paint. If skin contact occurs wash with water.

Color varies for country to country.

SCOPE LUBRICANTS

SUPER 4000

Heavy Duty Brake Fluid - DOT-4

SCOPE Super 4000 Heavy Duty Brake & Clutch Fluid DOT-4 is a premium glycol type quality automotive Brake Fluid meeting the specifications of FMVSS No. 116, DOT-4, SAE J1704, ISO 4925.

Main Benefits

- Long volatility and low pour point ensure performance in normal temperature range
- Provides protection against rust and corrosion
- Compatible with rubber seals
- Miscible with other approved glycol ether
- Good braking response
- Reduces chances of vapor lock

Applications

SCOPE Super 4000 Heavy Duty Brake Fluid DOT-4 is generally used in disc and drums brake systems as well as clutch fluid meeting above standards.

Typical Physical Characteristics

Density @ 20°C	1.050
Appearance	C&B
Viscosity, cSt @ -40°C	Max. 1500
Viscosity, cST @ 100°C	Min. 2.10
ERBP (Dry), °C	266
ERBP (Wet), °C	160
pH Value	7.5
Color	Varies

Color varies for country to country.

SCOPE
LUBRICANTS

SUPER 3000

Heavy Duty Brake Fluid - DOT 3

SCOPE Super 3000 Heavy Duty Brake & Clutch Fluid DOT-3 is a premium glycol quality automotive Brake Fluid meeting the specifications of FMVSS No. 116, DOT-3, SAE J1703.

Main Benefits

- Long volatility and low pour point ensure performance in normal temperature range
- Provides protection against rust and corrosion
- Compatible with rubber seals
- Miscible with other approved glycol ether
- Good braking response
- Reduces chances of vapor lock

Applications

SCOPE Super 3000 Heavy Duty Brake Fluid DOT-3 is generally used in disc and drums brake systems as well as clutch fluid meeting above standards.

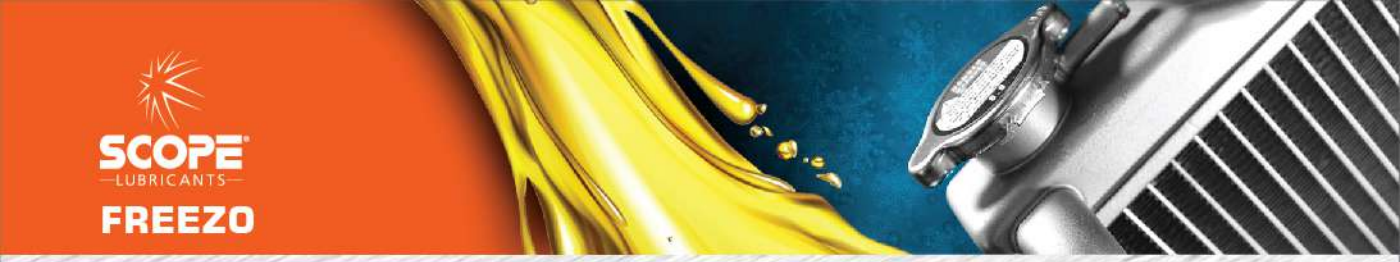
Typical Physical Characteristics

Density @ 20°C	1.030
Appearance	C&B
Viscosity, cSt @ -40°C	Max. 1200
Viscosity, cST @ 100°C	Min. 1.90
ERBP (Dry), °C	240
ERBP (Wet), °C	150
pH Value	9.0
Color	Varies

Color varies for country to country.

SCOPE
LUBRICANTS

FREEZO



Premium Quality Coolant

SCOPE Freezo Premium Coolant is a OAT based, environment friendly based fluid with anti-rust inhibitor. The concentrate is suitable for all passenger cars, light and heavy vehicles. It provides higher boiling point and lower freezing point than water which makes it anti-boil and antifreeze coolant.

Main Benefits

- Protect against rust and corrosion.
- Provide excellent heat transfer characteristics.
- Compatible with all rubber hoses used in cooling systems.
- Good solubility and stability in both soft and hard water.
- Outstanding anti-freeze property.

Applications

SCOPE Anti-Freeze Concentrate can be used in all petrol engine cars, 4 WDs, Light and heavy diesel vehicles. It is also available in 33%, 50%, 66% softened / de-mineralized water for automotive radiator cooling systems.

Typical Physical Characteristics

Test	50:50
Characteristics Appearance	Mobile liquid
pH (50/50 vol/vol)	7.7 - 8.6
Specific Gravity	1.066
Density	1.1103 kg/L
Freezing Point	-36.2oC (50% by Vol.)
Boiling Point	108.2°C (50% by Vol.)

SCOPE LUBRICANTS

MOLYCOM

Lithium Moly Complex Grease

SCOPE Lithium Moly Complex Grease is a lithium complex grease with Molybdenum disulfide as the solid lubricant with excellent anti-wear and extreme pressure properties. It carries excellent structural and chemical stability and is recommended for roller bearings subjected to very heavy loads and shock loadings.

Main Benefits

- Good water washout, spray-off and extended service capabilities.
- Excellent load carrying capability.
- Corrosion and wear protection.

Applications

SCOPE Lithium Moly Complex Grease with Molybdenum disulfide is recommended for universal joints and CV joints of automotive and stationary equipments. It is also used for all general-purpose applications, chassis and plain bearing, cranes, buildings and construction equipments.

Typical Physical Characteristics

NLGI Grade	2
Soap Type	Lithium complex
Structure	Smooth/Tacky
Solid Lubricant Additive	MoS_2
Kinematic Viscosity @ +40°C cSt	320
Kinematic Viscosity @ 100°C cSt	22
Dropping Point	250
Corrosion prevention	Pass
Four-Ball EP Weld Load, Kg	400
Four-Ball Wear Test Scar, mm	0-4

Other NLGI grades are availalbe upon request.

SCOPE LUBRICANTS

LICO

Lithium Complex Grease

SCOPE Lithium Complex Grease intended for a wide variety of application. It provides excellent high temperature with excellent adhesion, structure ability and resistance to water. This grease has a high level of chemical stability and offers excellent protection against rust, corrosion and wear, especially on axles, rings and bearings. It does not contain lead, chlorine or nitrite.

Main Benefits

- Excellent resistance to water washes out and contamination.
- High anti-wear and extreme pressure performance to be suitable for a wide range of bearing speeds.
- Extended intervals between relubrication due to long product lift even under sever operating conditions.
- High anti-wear and extreme pressure performance to be suitable for a wide range of bearing speeds.

Applications

Recommended for severe applications where good high temperature and anti-leakage are required, and for construction mining equipment, paper and steel mills and other heavy-duty applications. It is designed to resist to water wash out, water ingress, corrosive environment and shocks and vibrations.

Typical Physical Characteristics

NLGI Grade	1.5
Soap Type	Lithium complex
Penetration at 25°C	305
Dropping Point, °C	>260
Kinematic Viscosity @ +40°C cSt (Base Oil)	460
Timken OK Load, Kg	20
Rust Protection, Distilled Water Washout Test	0-0
Rust Protection, Acidic Water (ph=4.5)	0-0
Four-Ball EP Weld Load, Kg	315
Four-Ball Wear Test, Scar, mm	0.5

Other NLGI grades are availalbe upon request.

SCOPE
LUBRICANTS

AMPLE EP

EP Grease Lithium - NLGI 1, 2 & 3

SCOPE Extreme Pressure Lithium Greases are made from refined mineral base oil thickened with lithium soap and enhanced with extreme-pressure agent. Extreme – Pressure greases are very effective in automotive and industrial applications.

Main Benefits

- Outstanding water resistance.
- Good mechanical and thermal stability, maintains consistency
- Throughout service life.
- Good anti-corrosion and anti- rust properties.
- Effective extreme pressure and load bearing qualities.

Applications

Automotive applications such as loaded bearings, universal joints.
Industrial equipments applications between temperatures ranging from -30°C to +120°C.
Good for both automotive and industrial equipments under constant load and severe shock loading conditions.
Good mechanical and thermal stability, maintain consistency.

Typical Physical Characteristics

NLGI Consistency	1	2	3
Soap Type	Lithium	Lithium	Lithium
Base Oil Type	Mineral	Mineral	Mineral
Drop Point, °C	190	190	195
Penetration, Worked @ 25°C (0.1mm)	325	275	240
Four-Ball EP Weld Load, Kg	315	315	315
Four-Ball Wear Test, Scar, mm	0.5	0.5	0.5

Other NLGI grades are availalbe upon request.

SCOPE
LUBRICANTS

AMPLE MP

MP Grease Lithium

SCOPE Multipurpose Lithium Greases are made from refined mineral base oil thickened with lithium soap, castor oil, derivating and anti-rust and anti-oxidant additives to provide reliable grease for automotive and industrial applications.

Main Benefits

- Outstanding water resistance.
- Good mechanical and thermal stability.
- Good anti-corrosion and anti-rust properties.

Applications

Automotive applications such as bearings and other grease parts, universal joints. Industrial equipments applications between temperatures ranging from -20°C to 120°C.

Typical Physical Characteristics

NLGI Consistency	2	3
Soap Type	Lithium	Lithium
Base Oil Type	Mineral	Mineral
Drop Point °C	180	185
Penetration, Worked @ 25°C (0.1mm)	275	235

Other NLGI grades are availalbe upon request.

SCOPE LUBRICANTS

MP CALCIUM GREASE

MP Calcium Grease

SCOPE Multi Purpose Calcium Greases are made from refined mineral base oil thickened with calcium soap and balanced additive package.

Main Benefits

- Outstanding water resistance.
- Resistance to contamination.
- Good anti-corrosion and anti-rust properties.

Applications

Automotive applications such as wheel bearings, chassis points, universal joints. Suitable for general applications where speed and load are moderate and operating temperature is less than 80°C

Typical Physical Characteristics

NLGI Consistency	2	3
Soap Type	Calcium	Calcium
Base Oil Type	Mineral	Mineral
Drop Point °C	90	90
Penetration, Worked @25°C (0.1mm)	275	235

Other NLGI grades are availalbe upon request.

SCOPE LUBRICANTS

TEXTRON

HVI Hydraulic Oil

SCOPE Textron HVI Hydraulic Oils are premium quality, shear stable, multi viscosity, anti-wear hydraulic fluids which incorporates a special viscosity index improver additives to enhance their viscosity/temperature characteristics.

Main Benefits

- Excellent oxidation stability.
- Resist oil thickening and deposit formation.
- High shear stability.
- Outstanding anti-wear performance.
- Excellent filterability.
- Rapid air release and corrosion protection

Applications

SCOPE Textron HVI Hydraulic Oil can be used in all Hydraulic and fluid power transmission system which are subjected to wide variations in temperatures.

Specification & Performance Standards

SCOPE Textron HVI Hydraulic Oil meets and exceeds the performance standards of Denison HF0, HF1, HF2, GM LHH-04-01, Vickers 1-2865, M-29505, DIN 51524 part 2, CINCINNATI P-68, P-69 and P-70, AFNOR NFE 48-0690 (DRY), AFNOR NFE 48-691 (WET) AFNOR NFE 48-603.

Typical Physical Characteristics

ISO Viscosity Grades	32	46	68	100
Viscosity, cSt @ 40°C	32	46	67	100
Viscosity, cSt @ 100°C	6.35	8.2	10.80	14.60
Viscosity Index	154	154	152	151
Pour Point, °C	-33	-27	-24	-21
Flash Point COC, °C	210	218	230	250
Air release value @ 50°C Max, minutes	7	8	9	-

Other ISO Viscosity grades are availalbe upon request.

SCOPE
LUBRICANTS

TEXTRON

AW Hydraulic Oil

SCOPE Textron AW Hydraulic oils are premium quality antioxidant, anti-wear, anti-rust hydraulic oils for industrial hydraulic applications blended with selected high quality base stocks and special additives to give excellent dimulsibility, superior oxidation and thermal stability and excellent load carrying capacity.

Main Benefits

- Excellent oxidation & thermal stability.
- Excellent load carrying capacity.
- Outstanding anti-wear performance.
- Superior filterability and good water separation.
- Low friction and hydraulic stability.
- Excellent air release and antifoam properties

Applications

SCOPE Textron AW Hydraulic Oils can be used in all Hydraulic and fluid power transmission systems suitable for a wide range of other industrial applications.

Specification & Performance Standards

SCOPE Textron Hydraulic Oils meets and exceeds the performance standards of Denison HFI, HF2, HFO specifications DIN 51524 PART 2, FORD M-6C32, CINCINNATI P-68, P-69, VICKERS M 29505 (Mobile Equipment), Vickers 1-2865 (Industrial Equipments) AFNOR NFE 48-603 HM, US steel 136 – 127, ASLE 64-1 to 64-4 70-1 to 70-3.

Typical Physical Characteristics

ISO Viscosity Grades	32	46	68	100	150	220
Viscosity, cSt @ 40°C	32	46	68	102	152	222
Viscosity, cST @ 100°C	5.35	6.65	8.65	10.9	14.7	18.90
Viscosity Index	102	101	98	95	95	95
Pour Point, °C	-27	-24	-21	-18	-18	-12
Flash Point COC, °C	210	226	236	240	250	260
Air release @ 50°C Minutes	2.9	3.8	6.2	-	-	-

Other ISO Viscosity grades are availalbe upon request.

RPM Compressor Oil

SCOPE RPM Compressor Oils are premium quality Air Compressor lubricants blended with high quality paraffinic base oils and selected anti-oxidant and rust inhibitors to give low carbon forming tendencies in Air Compressor applications. They are designed for use in rotary and reciprocating compressors both for stationery and mobile applications. These oils can also be used in vacuum pumps because of their low volatility.

Main Benefits

- Very good oxidation resistance
- Very good Air release and anti-foam properties
- Very good rusting and wear protection properties
- Maintains internal surface cleanliness
- Longer oil drains interval

Applications

SCOPE RPM Compressor oils can be used in rotary and reciprocating compressors both for stationery and mobile applications. They can also be used in vacuum pumps and screw pumps.

Specification & Performance Standards

SCOPE RPM Compressor oils meets the German standards DIN 51506 VD-L

Typical Physical Characteristics

ISO Viscosity Grades	32	46	68	100
Viscosity, cSt @ 40°C	32	46	68	98
Viscosity, cST @ 100°C	5.35	6.65	8.65	10.9
Viscosity Index	99	98	98	95
Pour Point, °C	-30	27	-24	-21
Flash Point COC, °C	208	214	234	246
Air release @ 50°C Minutes	2.9	3.8	6.2	-

Other ISO Viscosity grades are availalbe upon request.

IEP Industrial Gear Oil

SCOPE IEP Industrial Gear Oils are premium quality extreme pressure oils designed primarily for lubrication of heavy duty industrial gears. Their high load carrying capacity and anti-friction characteristics combine to offer superior performance in gears and in all industrial applications. They are formulated using high viscosity Index, solvent refined base oils and incorporate special sulfur - phosphorous additives to provide an extreme pressure performance.

Main Benefits

- Excellent load carrying and anti-friction characteristics.
- Outstanding oxidation and thermal stability.
- Effective corrosion inhibition.
- Effective water shedding properties.

Applications

SCOPE IEP Industrial Gear oils can be used in steel gear transmissions, Industrial gears transmissions, Industrial gear drives where a full EP performance is required, circulating and splash lubricated systems and bearings.

Specification & Performance Standards

SCOPE IEP Industrial Gear Oils meets AGMA 250.04 2 EP to 7 EP, AGMA 251.02 4 EP, 5EP, 6EP, DAVID BROWN SL 53.101, US Steel 220 & 224 . Cincinnati Milacron P-63 (68). DIN 51517 part III

Typical Physical Characteristics

David Brown / Grade No	2EP	3EP	4EP	5EP	6EP	7EP
ISO Viscosity Grades	68	100	150	220	320	460
Viscosity, cSt @ 40°C	68	101	150	220	320	450
Viscosity, cSt @ 100°C	8.6	11.2	14.6	18.80	24.01	30.00
Viscosity Index	97	96	96	95	95	95
Pour Point, °C	-24	-21	-18	-15	-12	-9
Flash Point COC, °C	220	232	242	248	254	260
Timken OK load KG	27	27	27	27	27	27

Other ISO Viscosity grades are availalbe upon request.

Soluble Cutting Oil

SCOPE Soluble cutting oil fluid has been formulated from premium quality base oils and superior additives suitable for lubricating and cooling a wide range of metal cutting and grinding operations.

It is used in machines with low to medium tensile ferrous metals, non-ferrous metals such as aluminum and alloys. It has greater ability to assist the tools in cutting apparatus. It dispersed acidity in water and produces stable emulsion.

It can be used for milling, boring and turning operations @10:1 up to 20:1 water and dilution and for grinding @40:1 dilution (Water:Oil)

Specification & Performance Standards

Scope Soluble Cutting Oil meets the performance requirement BIS 1115.

Typical Physical Characteristics

	Soluble Cutting Oil
Viscosity, cSt @ 40°C	47.0
Viscosity, cSt @ 100°C	6.8
Emulsion Test	Pass
Flash Point COC	185
pH in 200 ppm hard water @2%	9.1

Other types of Metal Working Oils are availalbe upon request.

Neat Cutting Oil

SCOPE Neat cutting oils 11L - 41H are cutting oils blended from high Viscosity Index Base Oils and Speciality additives to work in conditions varying from tool, workpiece and type of machines.

SCOPE Neat Cutting Oil recommended for machining ferrous as well as non ferrous metals in various manual and CNC machines, including robotic manufacturing and 3D printing.

Typical Physical Characteristics (Selected Grades)

	Neat Cut Ferrous	Neat Cut non-Ferrous
Appearance	B & C	B & C
Specific Gravity @ 15 c	0.865	0.865
Viscosity Index Viscosity cSt @ 40°c	22	22
Viscosity Index Viscosity cSt @ 100°c	4.35	4.35
Emulsion	Immiscible	Immiscible

There are 12 different grades of Metal Working Fluids are available. Please contact us for a proper selection

HT Heat Transfer Fluid

SCOPE HT Heat Transfer fluids are high performance mineral oils and have good thermal conductivity. It is recommended as a heating medium and can operate at a maximum temperature of 270°C. They are available in various viscosity grades.

Main Benefits

- Uniform heat transfer.
- Long service life.
- Protects against corrosion.
- Prevents deposits.

Applications

SCOPE HT Heat Transfer fluids are recommended in service for closed systems whose bulk temperature does not exceed 270°C.

Typical Physical Characteristics

ISO Viscosity Grades	32	46	68	100
Viscosity, cSt @ 40°C	31	45	67	98
Viscosity, cSt @ 100°C	5.25	6.65	8.50	10.90
Viscosity Index	99	99	96	95
Pour Point	-18	-15	-12	-9
Flash Point COC	210	218	234	244

Other Technical Data availalbe upon request.

CENTEX TPEO

Marine Engine Oil - 12 TBN & 15 TBN

SCOPE Centex TPEO Marine Engine oil are a blend of superior quality high viscosity index paraffinic base stock with balanced additive package. They have TBN value of 12 & 15 and are recommended for crank case and cylinder lubrication of trunk piston type naturally aspirated or turbo charged medium speed marine and stationery diesel engines. Burning heavy fuel up to 1.0% with sulfur content under severe operating conditions.

Main Benefits

- Excellent anti-wear properties.
- Reduces ring & linear wear.
- Excellent detergent dispersant properties to reduce deposits formation and keeps the engine clean.
- Prevents scuffing and scoring of engine parts.
- Excellent anti-corrosion properties.

Applications

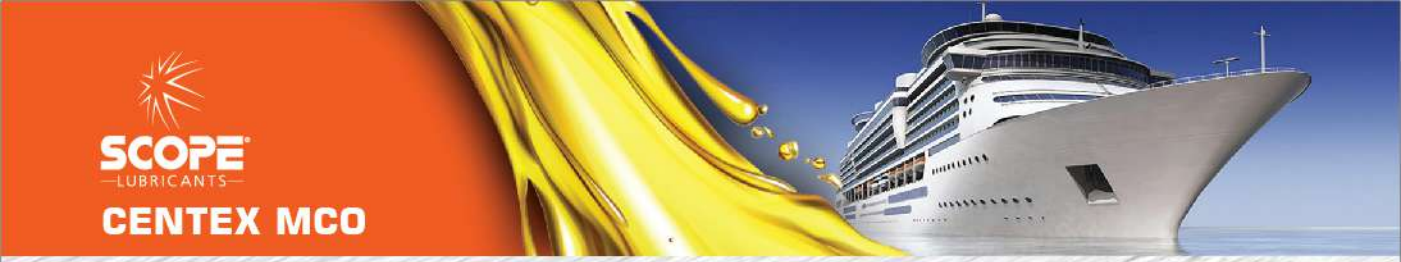
SCOPE Centex TPEO Marine Engine Oil can be used for crank case and cylinder lubrication of Truck piston type naturally aspirated or turbo charged medium speed marine and stationery diesel engines.

Specifications

SCOPE Centex TPEO Marine Engine Oil meets API service classification of API CD, MAN ES (MAN B & W), Yanmar & Daihatsu Engines besides Wartsila (WinGD).

Typical Physical Characteristics

Grade	312	412	512	315	415	515
SAE Viscosity Grades	30	40	50	30	40	50
Viscosity, cSt @ 40°C	110	150	220	110	150	220
Viscosity, cSt @ 100°C	12	15	19	12	15	19
Viscosity Index	98	99	97	98	99	97
Pour Point	-24	-21	-15	-24	-21	-18
Flash Point COC °C	230	240	250	228	238	248
TBN mg KOH/gm	12	12	12	15	15	15



CENTEX MCO

Heavy Duty Marine Cylinder Oil - 24 TBN, 30 TBN, 40 TBN, 50 TBN

SCOPE Centex MCO Heavy Duty Marine Cylinder Oils are superior quality detergent lubricants blended specifically for use in the truck piston engines in a variety of services. They are available in various TBN Numbers to match the different types of fuels and sulfur content. They are available in Total Base Numbers of 24, 30, 40, 50, 70 and 100 in SAE 30, 40 & 50 viscosity grades.

Main Benefits

- Excellent Engine cleanliness.
- Very high oxidation resistance.
- Very good Base Number retention.

Applications

SCOPE Centex MCO Heavy Duty Marine Cylinder Oils be used in medium speed diesel engines burning residue fuels.

Specifications

SCOPE Centex MCO Heavy Duty Cylinder Engine Oils meets the API service classification standards of API - CD, MAN ES (MAN B & W), Wartsila (WinGD) and JEC (UE Engines)

Typical Physical Characteristics

	24 TBN			30 TBN			40 TBN			50 TBN		
Grades	**324**	**424**	**524**	**330**	**430**	**530**	**340**	**440**	**540**	**350**	**450**	**550**
SAE Viscosity Grades	**30**	**40**	**50**	**30**	**40**	**50**	**30**	**40**	**50**	**30**	**40**	**50**
Viscosity, cSt @ 40°C	108	150	220	107	155	224	108	155	224	108	155	224
Viscosity, cSt @ 100°C	12	15.2	19.2	12	15.5	19.5	12	15.5	19.5	12	15.5	19.5
Viscosity Index	100	102	98	107	102	99	100	102	99	100	102	99
Pour Point	-24	-21	-18	-24	-21	-18	-24	-21	-18	-24	-21	-18
Flash Point COC °C	226	236	244	226	236	246	226	236	246	226	236	246
TBN mg KOH/gm	24	24	24	30	30	30	40	40	40	50	50	50

PRODUCT STORAGE AND SHELF LIFE

- It is absolutely necessary to store products properly to ensure quality. It is recommended to store lubricants indoors at moderate temperature away from dust, moisture and other containing sources.
- If out door storage cannot be avoided, drums must be laid on their sides with bungs horizontal in order to prevent migration of moisture.
- Mixing of oil should be avoided as some oil formulations are incompatible.
- The majority of scope products remain suitable for use up to 3 years when stored properly. This period can be reduced to 2 years or less if stored out doors.
- Some products may have shorter shelf lives as shown below:

Liquid lubricants/stored indoors ..... up to 3 years.
Liquid Lubricants/stored outdoors ..... max 2 years.
Electrical Insulation oils ..... max 1 year.
Greases ..... max 2 years.
Emulsifiable oils containing biocides ..... max 6 months.
Brake Fluids ..... max 1 year / 1 day after opening.
Radiator Coolant ..... max 2 years.

SCOPE
LUBRICANTS

APPROVALS & CERTIFICATIONS

JAS-ANZ
ICS
ISO 9001:2015

علامة الجودة الإماراتية
Emirates Quality Mark
NB-0002

GCC ACCREDITATION CENTER
GAC
Testing
ISO/IEC 17025:2017
ATL 0047

API
American Petroleum Institute
FOR GASOLINE ENGINES

VOLVO

MAN

Mercedes-Benz

PORSCHE
STUTTGART

Cummins

الشركة المتحدة للشحوم و الزيوت ذ.م.م.

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ISO 9001:2015
An ISO 9001: 2015 Certified Company