

# HIGH PERFORMANCE MARINE LUBRICANTS



Belgin is one of the leading lubricant producers in Turkey with its deep technical expertise and long-term cooperation with its business partners dating from 1953 to the present day. Being one of Turkey's main exporters of lubricants, today Belgin proudly exports its products to over 50 countries across 5 continents. Responding to the needs of almost all industrial sectors, Belgin produces automotive and marine oils with the Lubex brand and greases with the Greson brand. Belgin is a member of various international sectoral institutions such as ELGI (European Lubricating Grease Institute), UEIL (Union of the European Lubricants Industry), ATIEL (The Technical Association of the European Lubricants Industry) and has hand-in-hand relationships with universities for technological developments.

Lubex is designed, developed and regularly updated by Belgin R&D Center with world-class and cutting-edge technology. Lubex has been increasing its market share in Turkey and it's export markets year by year at a growing rate. Lubex is the address of smart choice, with its innovative problem solving competencies, export experience, logistics skills, smooth supply capability, wide range of product portfolio and customer focused approach even under tough situations.

### Why Lubex Marine?

- Sustainable Experience Since 1953
- Using High Quality Raw Materials
- Supply Capability in All Ports of Turkey
- TÜRKAK Accreditation Certified Experiment Laboratory
- Highly Equipped R&D Center
- Competitive Pricing Without Compromising Quality
- Sustainable Quality at Each Step of Production and Shipment
- Long-Term Strategy and Business Partnership Approach

### Commercially Supply Ports in Turkey





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## 4 STROKE TRUNK PISTON ENGINE OILS

PRODUCT GROUP	PRODUCT NAME	DEFINITION	SAE	Density @20 °C (g/cm <sup>3</sup> )	Kin.Viscosity @100 °C (cSt)	Pour Point (°C)	TBN (mgKOH/gr)
4 STROKE TRUNK PISTON MARINE ENGINE OILS	LUBEX MARINE 30/12	It is a marine diesel engine oil which is blended with high viscosity index paraffinic base oils and the addition of specially selected additives to be used in medium and high speed 4-Stroke Trunk Piston (TPEO) engines burning distilled fuel with a sulphur content of < 1.0%.	30	0,890	11,7	-18	12
	LUBEX MARINE 40/12		40	0,894	15,7	-18	12
	LUBEX MARINE 30/15	It is a marine diesel engine oil which is blended with high viscosity index paraffinic base oils and the addition of specially selected additives to be used in medium and high speed 4-Stroke Trunk Piston (TPEO) engines burning distilled fuel with a sulphur content of < 1.0%.	30	0,810	11,6	-18	15
	LUBEX MARINE 40/15		40	0,896	15,3	-18	15
	LUBEX MARINE 30/20	It is a marine diesel engine oil which is blended with high viscosity index paraffinic base oils and the addition of specially selected additives to be used in medium and high speed 4-Stroke Trunk Piston (TPEO) engines burning distilled fuel with a sulphur content of < 2.0%.	30	0,894	11,5	-18	20
	LUBEX MARINE 40/20		40	0,903	14,8	-18	20
	LUBEX MARINE 30/30	It is a marine diesel engine oil which is blended with high viscosity index paraffinic base oils and the addition of specially selected additives to be used in medium and high speed 4-Stroke Trunk Piston (TPEO) engines burning fuel with a sulphur content of < 3.0%.	30	0,903	11,5	-18	30
	LUBEX MARINE 40/30		40	0,917	14,5	-18	30
	LUBEX MARINE 30/40	It is a marine diesel engine oil which is blended with high viscosity index paraffinic base oils and the addition of specially selected additives to be used in medium and high speed 4-Stroke Trunk Piston (TPEO) engines burning fuel with a sulphur content of < 3.0%.	30	0,904	11,7	-18	40
	LUBEX MARINE 40/40		40	0,917	15,7	-18	40
	LUBEX MARINE 40/50	It is a marine diesel engine oil which is blended with high viscosity index paraffinic base oils and the addition of specially selected additives to be used in medium and high speed 4-Stroke Trunk Piston (TPEO) engines burning fuel with a sulphur content of > 3.0%.	40	0,921	14,8	-18	55

## 2 STROKE CROSSHEAD CYLINDER OILS

PRODUCT GROUP	PRODUCT NAME	DEFINITION	SAE	Density @20 °C (g/cm <sup>3</sup> )	Kin.Viscosity @100 °C (cSt)	Pour Point (°C)	TBN (mgKOH/gr)
2 STROKE CROSSHEAD CYLINDER OILS	LUBEX MARINE CYL OIL 50/100	It is a cylinder oil blended with high viscosity index paraffinic base oils and the addition of specially selected additives to be used in low speed 2-Stroke Crosshead engines that burn high sulphur HSFO fuel.	50	0,958	20,6	-18	100
	LUBEX MARINE CYL OIL 50/70	It is a cylinder oil blended with high viscosity index paraffinic base oils and the addition of specially selected additives to be used in low speed 2-Stroke Crosshead engines that burn high sulphur HSFO fuel.	50	0,938	20,5	-18	70
	LUBEX MARINE CYL OIL 50/40	It is a cylinder oil blended with high viscosity index paraffinic base oils and the addition of specially selected additives to be used in low speed 2-Stroke Crosshead engines that burn low sulphur LSFO fuel.	50	0,913	19,5	-18	40
	LUBEX MARINE CYL OIL 50/25	It is a cylinder oil blended with high viscosity index paraffinic base oils and the addition of specially selected additives to be used in low speed 2-Stroke Crosshead engines that burn low sulphur VLSFO fuel.	50	0,911	19,7	-18	25
	LUBEX MARINE CYL OIL 50/17	It is a cylinder oil blended with high viscosity index paraffinic base oils and the addition of specially selected additives to be used in low speed 2-Stroke Crosshead engines that burn low sulphur VLSFO fuel.	50	0,910	19,0	-18	17

## 2 STROKE CROSSHEAD SYSTEM OILS

PRODUCT GROUP	PRODUCT NAME	DEFINITION	SAE	Density @20 °C (g/cm <sup>3</sup> )	Kin.Viscosity @100 °C (cSt)	Pour Point (°C)	TBN (mgKOH/gr)
2 STROKE CROSSHEAD SYSTEM OILS	LUBEX MARINE SYT OIL 30/5	It is a system oil blended with high viscosity index paraffinic base oils with the addition of specially selected additives to be used in low speed 2-Stroke Crosshead engines.	30	0,890	10,9	-18	5
	LUBEX MARINE SYT OIL 40/5	It is a system oil blended with high viscosity index paraffinic base oils with the addition of specially selected additives to be used in low speed 2-Stroke Crosshead engines.	40	0,880	15,1	-15	5

# GEAR OILS

PRODUCT GROUP	PRODUCT NAME	DEFINITION	ISO VG	Density @20 °C (g/cm³)	Kin.Viscosity @40 °C (cSt)	Viscosity Index	Pour Point (°C)
GEAR OILS	RECOMPOUND 68	They are mineral based enclosed gearbox oils that are blended with high viscosity index paraffinic base oils and special additives. They are suitable for gearboxes operating under heavy or shock loads. They have a wide range of use in industrial spur, helical and bevel gears operating under conditions with oil temperatures up to 100°C.	68	0,890	68	98	-24
	RECOMPOUND 100		100	0,895	100	98	-24
	RECOMPOUND 150		150	0,900	150	98	-21
	RECOMPOUND 220		220	0,910	220	96	-18
	RECOMPOUND 320		320	0,915	320	96	-15
	RECOMPOUND 460		460	0,915	460	95	-12
	RECOMPOUND 680		680	0,918	680	92	-9
	RECOMPOUND SYN 68	They are enclosed gearbox oils operating under heavy conditions that are blended with high viscosity index synthetic polyalphaolefin (PAO) base oils and superior additive technology. They display superior lubrication performance at very low and very high operating temperatures.	68	0,842	68	157	-54
	RECOMPOUND SYN 100		100	0,844	100	157	-48
	RECOMPOUND SYN 150		150	0,848	150	160	-45
	RECOMPOUND SYN 220		220	0,850	220	161	-40
	RECOMPOUND SYN 320		320	0,853	320	162	-40
	RECOMPOUND SYN 460		460	0,856	460	163	-36
	RECOMPOUND SYN 680		680	0,858	680	165	-33
	RECOMPOUND PG 100	They are gear oils that are blended with high viscosity index synthetic polyglycol base oils and special additives to be used in worm gears operating under heavy conditions and in circulating lubrication systems.	100	0,958	100	221	-33
	RECOMPOUND PG 150		150	0,938	150	223	-33
	RECOMPOUND PG 220		220	0,913	220	224	-33
	RECOMPOUND PG 320		320	0,911	320	256	-33
	RECOMPOUND PG 460		460	0,910	460	256	-33

## HYDRAULIC OILS

PRODUCT GROUP	PRODUCT NAME	DEFINITION	ISO VG	Density @20 °C (g/cm³)	Kin.Viscosity @40 °C (cSt)	Viscosity Index	Pour Point (°C)
HYDRAULIC OILS	HIDROTEX SUPER HVI 15	They are HVI type heavy duty hydraulic oils blended with high viscosity index paraffinic base oils and special additives. They are resistant to corrosion and oxidation, and suitable to be used in all industrial and mobile hydraulic systems.	15	0,859	15	153	-30
	HIDROTEX SUPER HVI 22		22	0,865	22	152	-30
	HIDROTEX SUPER HVI 32		32	0,871	32	151	-30
	HIDROTEX SUPER HVI 46		46	0,880	46	151	-30
	HIDROTEX SUPER HVI 68		68	0,885	68	151	-30
	HIDROTEX SUPER HVI 100		100	0,888	100	152	-30

## AIR COMPRESSOR OILS

PRODUCT GROUP	PRODUCT NAME	DEFINITION	ISO VG	Density @20 °C (g/cm³)	Kin.Viscosity @40 °C (cSt)	Viscosity Index	Pour Point (°C)
AIR COMPRESSOR OILS	KOMPRESOROIL 32	They are mineral air compressor oils blended with high viscosity index paraffinic base oils and special additives.	32	0,875	32	98	-18
	KOMPRESOROIL 46		46	0,882	46	98	-18
	KOMPRESOROIL 68		68	0,888	68	98	-12
	KOMPRESOROIL 100		100	0,890	100	97	-12
	KOMPRESOROIL 150		150	0,895	150	98	-9
	SYNTEX COM 46	They are synthetic compressor oils blended with high viscosity index polyalphaolefin (PAO) base oils and special additives.	46	0,882	46	157	-45
	SYNTEX COM 68		68	0,888	68	163	-45
	SYNTEX COM 100		100	0,895	100	168	-45
	SYNTEX COM 220		220	0,900	220	172	-45
	SYNTEX COM DE 100	It is a high performance and long life reciprocating air compressor oil blended with specially synthetic base oils and additives.	100	0,957	100	66	-36

# TURBINE OILS

PRODUCT GROUP	PRODUCT NAME	DEFINITION	ISO VG	Density @20 °C (g/cm³)	Kin.Viscosity (cSt) @40 °C	Viscosity Index	Pour Point (°C)
TURBINE OILS	TURBINOIL 32	They are mineral turbine oils blended with high viscosity index paraffinic base oils and special additives.	32	0,880	32	98	-27
	TURBINOIL 46		46	0,888	46	98	-24
	TURBINOIL 68		68	0,890	68	98	-21
	TURBINOIL 100		100	0,895	100	98	-18
	TURBINOIL 150		150	0,900	150	98	-15

# GREASES

PRODUCT GROUP	PRODUCT NAME	DEFINITION	Thickener Type	NLGI No	Dropping Point (°C)	Worked Penetration (25°C, 60 strokes)	Working Temperature Range (°C)
GREASES	GRESON CG 1	Greson CG series are calcium soap general purpose grease with graphite solid lubricants and especially used in medium load applications where water contact is inevitable.	Calcium	1	90	325	-20 / +70
	GRESON CG 2			2	95	275	-20 / +70
	GRESON LIT EP 1	Greson LIT EP series are lithium soap multi-purpose grease with EP additives, and used especially in high temperature applications operating under heavy and shock loads.	Lithium	1	180	330	-20 / +130
	GRESON LIT EP 2			2	190	275	-20 / +130
	GRESON LIT EP 3			3	195	240	-20 / +130
	GRESON LC EP 2	Greson LC EP series are lithium/calcium soap multi-purpose greases used in severe operating conditions where water resistance is required in addition to high temperature resistance and EP properties.	Lithium/Calcium	2	170	269	-20 / +120
	GRESON LC EP 3			3	175	240	-20 / +120
	GRESON LK 1	Greson LK series are high performance lithium complex based greases with high temperature resistance and EP properties.	Lithium Complex	1	240	320	-20 / +180
	GRESON LK 2			2	250	275	-20 / +180
	GRESON LK 3			3	250	245	-20 / +180
	GRESON LKM 0	Greson LKM series are lithium complex based multi-purpose greases with its molybdenum disulfide (MoS <sub>2</sub> ) solid additive that can be used in vibration and shock load applications with its high temperature resistance and EP properties.	Lithium Complex	0	220	375	-20 / +180
	GRESON LKM 1			1	230	330	-20 / +180
	GRESON LKM 2			2	250	275	-20 / +180
	GRESON KSX 2	Greson KSX 2 is a calcium sulfonate complex based multi-purpose and long life high performance grease with its high pressure, high temperature and superior water resistance.	Calcium Sulphonate	2	>300	265-295	-20 / +180



## BIO PRODUCTS

PRODUCT GROUP	PRODUCT NAME	DEFINITION	ISO VG	Density @20 °C (g/cm³)	Kin.Viscosity @40 °C (cSt)	Viscosity Index	Pour Point (°C)
BIO PRODUCTS	LUBEX BIOMARINE HF 46	Lubex Biomarine HF Series are hydraulic oils blended with synthetic esters and new generation additives that are developed for use in hydraulic and power transmission systems are easily biodegradable and meeting the United States Environmental Protection Agency's (EPA) 2013 Vessel General Permit (VGP) requirements.	46	0,920	46	>180	-42
	LUBEX BIOMARINE HF 68		68	0,914	68	>180	-39
	LUBEX BIOMARINE STN 100	Lubex Biomarine STN 100 is blended with synthetic esters and new generation additives, which is easily biodegradable and meeting the United States Environmental Protection Agency's (EPA) 2013 Vessel General Permit (VGP) requirements to be used in stern tube lubrication of ships.	100	0,920	100	>180	-27

## HEAT TRANSFER OILS

PRODUCT GROUP	PRODUCT NAME	DEFINITION	Density @20 °C (g/cm³)	Kin.Viscosity @40 °C (cSt)	Flash Point (°C)	Pour Point (°C)
HEAT TRANSFER OIL	THERMOIL 680	It is a mineral-based heat transfer oil blended with high viscosity index paraffinic base oils and special additives.	0,869	30-37	220	<-12

## AUXILIARY DIESEL ENGINE OILS

PRODUCT GROUP	PRODUCT NAME	DEFINITION	SAE	Density @15 °C (g/cm³)	Kin.Viscosity @100 °C (cSt)	Viscosity Index	Pour Point (°C)
AUXILIARY DIESEL ENGINE OILS	LUBEX ROBUS PRO 10W-40	They are multi-purpose high-performance heavy-duty diesel engine oils that can be used in turbocharged trucks, buses, construction equipment and generator sets with their advanced formulation.	10W-40	0,868	14,1	150	-36
	LUBEX ROBUS PRO 15W-40		15W-40	0,879	15,1	138	-33

## DIGITAL ANALYSIS MONITORING SYSTEM

The fastest, most convenient, reliable, and efficient online service to view records and oil analysis reports of machinery and equipment.

LubriVision is a service that will increase profitability and operational efficiency;

- Saves time and cost spent on maintenance planning activities.
- Minimizes unplanned maintenance activities and production downtime losses.
- Reduces inventory and spare parts costs.

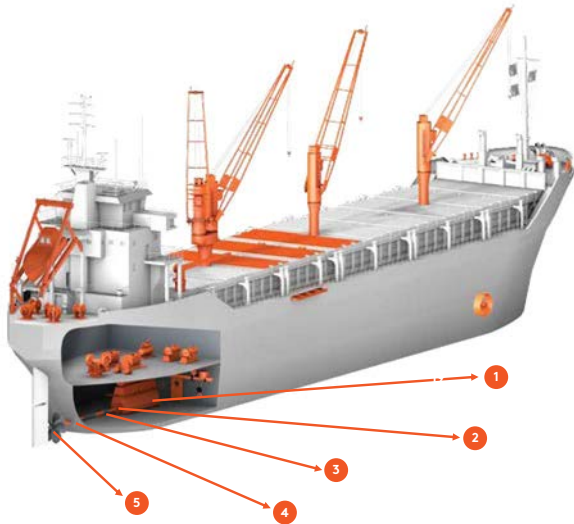
By closely following the trends in analysis reports of the samples taken from machinery and equipment on board, it enables users;

- To continue the operation properly and efficiently,
- To detect possible failures and problems before they become severe,
- To determine the root causes of possible performance impairment by closely monitoring the performance of the equipment and lubricants, and to take corrective actions accordingly.

It is an early warning system that will provide comfort in the operations within the framework of predictive and preventive maintenance.

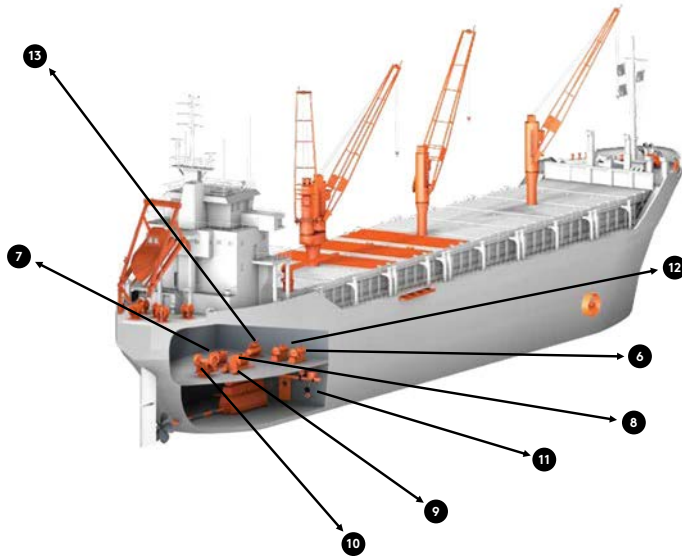


## Propulsion Machinery and Recommended Oils



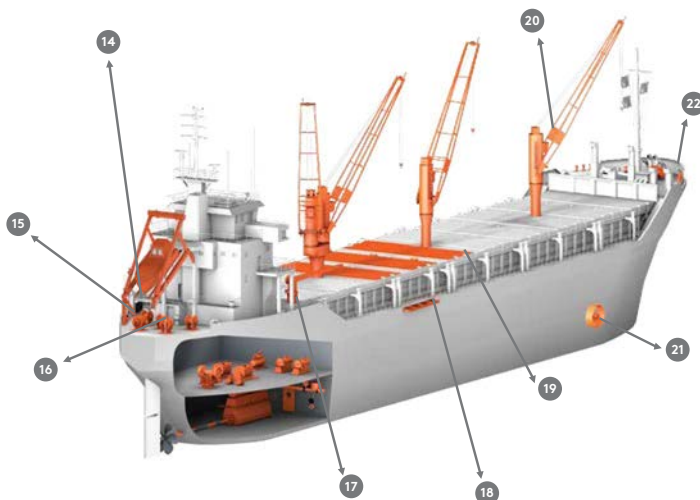
- 1 MAIN ENGINE**  
Lubex Marine 30 Series,  
Lubex Marine 40 Series,  
Lubex Marine Cyl 50 Series
- 2 REDUCTION GEAR**  
Recompound Series,  
Recompound Syn Series,  
Recompound PG Series,  
Lubex Marine 30 Series,  
Lubex Marine 40 Series
- 3 INTERMEDIATE SHAFT**  
Lubex Marine 30 Series,  
Lubex Marine 40 Series
- 4 STERN TUBE**  
Lubex Marine 30 Series,  
Lubex Marine 40 Series,  
Lubex Bio Marine STN 100
- 5 PITCH PROPELLER**  
Hidrotex Super HVI Series,  
Lubex Bio Marine HF Series

## Auxiliary Machinery and Recommended Oils



- 6 AUXILIARY DIESEL GENERATORS**  
Lubex Marine 30 Series,  
Lubex Marine 40 Series
- 7 THERMAL OIL BOILER**  
Thermoil 680
- 8 AIR COMPRESSORS**  
Kompresoroil Series,  
Syntex Com Series,  
Syntex Com DE 100
- 9 SEPARATORS**  
Recompound Series,  
Recompound Syn Series,  
Recompound PG Series
- 10 RUDER CARRIER AND STEERING GEAR**  
Recompound Series,  
Recompound Syn Series,  
Recompound PG Series,  
Hidrotex Super HVI Series
- 11 MACHINERY ROOM CRANE**  
Recompound Series,  
Recompound Syn Series,  
Recompound PG Series,  
Hidrotex Super HVI Series
- 12 EMERGENCY GENERATOR**  
Lubex Robus Pro 10W-40,  
Lubex Robus Pro 15W-40
- 13 STARTING AIR COMPRESSOR**  
Kompresoroil Series,  
Syntex Com Series,  
Syntex Com DE 100

## Deck Machinery and Recommended Oils



- 14 LIFE BOAT ENGINE**  
Lubex Robus Pro 10W-40,  
Lubex Robus Pro 15W-40
- 15 LIFE BOAT CRANE**  
Hidrotex Super HVI Series,  
Lubex Bio Marine HF Series
- 16 WINDLASS CRANE**  
Hidrotex Super HVI Series,  
Lubex Bio Marine HF Series
- 17 PROVISION CRANE**  
Recompound Series,  
Recompound Syn Series,  
Hidrotex Super HVI Series,  
Lubex Bio Marine HF Series
- 18 ACCOMMODATION LADDER WINCH**  
Hidrotex Super HVI Series,  
Lubex Bio Marine HF Series
- 19 CARGO HATCH COVER**  
Hidrotex Super HVI Series,  
Lubex Bio Marine HF Series
- 20 CARGO & DECK CRANE**  
Recompound Series,  
Recompound Syn Series,  
Hidrotex Super HVI Series,  
Lubex Bio Marine HF Series
- 21 BOW THRUSTER**  
Recompound Series,  
Recompound Syn Series,  
Hidrotex Super HVI Series,  
Lubex Bio Marine HF Series
- 22 ANCHOR WINCH**  
Hidrotex Super HVI Series,  
Lubex Bio Marine HF Series
- ALL GREASE POINTS**  
GRESON Series

