



LUKOIL Marine Lubricants

PRODUCTS 

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MARINE IN ALL WE DO!



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ABOUT

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GENERAL

LUKOIL Marine Lubricants offers a full range of the highest quality marine products in all major ports around the globe. As your trusted partner we ensure the best possible service. This Product brochure provides technical information about our Marine grade range.

Further detailed technical information on each product can be obtained from the relevant product data sheet (PDS) or the Material and Safety Datasheet (MSDS) that describes the product in regards to safety in use, handling and transport.

HEALTH, SAFETY AND ENVIRONMENT PROTECTIONS

LUKOIL Marine Lubricants operates in strict compliance with LUKOIL's Health, Safety and Environment policy. Operating procedures will act to ensure the health and safety of employees, contractors, customers and the public. LUKOIL Marine Lubricants will also act in a socially responsible manner in protecting the environment and preserving natural resources. A comprehensive Health, Safety and Environment Management System has been developed and is operated worldwide to achieve and maintain these objectives.

LUKOIL Marine Lubricants encourages open dialogue with all parties on matters of health, safety and the environment. For more information, please visit www.lukoil.com.

The user is responsible for evaluating and using products in a safe manner and is expected to comply with all applicable laws and regulations. On request, a Safety Data Sheet is available for all products. It describes the product in terms of safety in use, handling and transportation. For further information about LUKOIL Marine Lubricants, please contact your LUKOIL Marine Lubricants representative or visit our website at www.lukoilmarine.com.

MAIN GRADES

	Grade	BN	Density	Kinematic Viscosity		VI	Pour Point	Flash Point	Application
	SAE	mgKOH/g	kg/m ³	cSt at 40°C	cSt at 100°C		°C	COG in °C	
Marine Cylinder Lubricants									
NAVIGO 100 MCL	50	100	960		20		-6	240	An entire range of Marine Cylinder Lubricants for low speed engines with excellent deposit control, anti wear properties and scuffing prevention to fulfill individual customer needs. A 40BN MCL called NAVIGO 40 MCL for distillate fuel and low sulphur fuel, a mid range MCL called NAVIGO 50 MCL and a standard MCL called NAVIGO 70 MCL both covering from 0,5% up to 3,5% sulphur fuel. The NAVIGO 100 MCL can help to optimize wear rate and operational cost depending on fuel quality and engine design.
NAVIGO 70 MCL	50	70	935		20		-6	240	
NAVIGO 50 MCL	50	55	925		20		-6	240	
NAVIGO 40 MCL	50	40	916		20		-6	240	

	Grade	BN	Density	Kinematic Viscosity		VI	Pour Point	Flash Point	Application
	SAE	mgKOH/g	kg/m ³	cSt at 40°C	cSt at 100°C		°C	COG in °C	
System Oil									
NAVIGO 6 SO	30	6	891		11,5		-6	220	Alkaline marine crankcase lubricant for slow speed engines. Outstanding thermal- and oxidation stability and detergency.

	Grade	BN	Density	Kinematic Viscosity		VI	Pour Point	Flash Point	Application
	SAE	mgKOH/g	kg/m ³	cSt at 40°C	cSt at 100°C		°C	COG in °C	
Trunk Piston Engine Oils									
NAVIGO TPEO 55/40	40	55	923		14,5		-6	230	NAVIGO TPEO range for the usage on highly rated medium speed diesel engines. These oils provide an excellent thermal- and oxidation stability with outstanding detergency and dispersancy. This leads to an exceptional deposit control especially in oil-cooled piston undercrowns. The range promises optimal adaption to the sulphur content of the fuel in use due to the BN range exceeding from BN 12 to BN 55.
NAVIGO TPEO 50/40	40	50	919		14,5		-6	230	
NAVIGO TPEO 40/40	40	40	915		14,5		-6	230	
NAVIGO TPEO 30/40	40	30	911		14,5		-6	230	
NAVIGO TPEO 20/40	40	20	901		14,5		-6	230	
NAVIGO TPEO 15/40	40	15	898		14,5		-6	230	
NAVIGO TPEO 12/40	40	12	897		14,5		-6	230	
NAVIGO TPEO 30/30	30	30	905		11,5		-6	230	
NAVIGO TPEO 20/30	30	20	899		11,5		-6	230	
NAVIGO TPEO 15/30	30	15	898		11,5		-6	230	
NAVIGO TPEO 12/30	30	12	897		11,5		-6	230	
NAVIGO TPEO 40 ULTRA	40	10	891		14,5		-15	230	
NAVIGO TPEO 30 ULTRA	30	10	891		11,5		-15	230	
AVANTGARDE M 40	40	9	898		14,5		-15	230	AVANTGARDE M30 and M40 are high performance SHPD monograde engine oils for the usage on high speed marine and power generation four-stroke turbocharged engines of latest generation.
AVANTGARDE M 30	30	9	898		11,5		-15	220	

Note: While the information and figures given here are typical of current production and confirm to specification, minor variations may occur. No warranty expressed or implied is given concerning the accuracy of the information or the suitability of the products.

	Grade	BN	Density	Kinematic Viscosity		VI	Pour Point	Flash Point	Application
	SAE	mgKOH/g	kg/m ³	15°C	cSt at 40°C		cSt at 100°C	°C	
Other Engine Oils									
NAVIGO DD 40	40	7	894	143	14,5	100	-15	230	NAVIGO DD is a heavy duty low ash detergent diesel engine oil specifically formulated to meet the latest Detroit Diesel two-cycle lubricant recommendations.
AVANTGARDE ULTRA 15W40	15W40	10	886	104	14,2	135	-30	224	All Season SHPD Engine Oil. Optimal for auxiliary - and emergency generator engines as well as lifeboat propulsion. API CI-4/SL specified.
TITAN Truck SAE 15W40	15W40		885	103	14,3	141	-28	237	All Season SHPD Engine Oil with high alloy ratio. Optimal for auxiliary - and emergency generator engines as well as lifeboat propulsion. API CH-4/SL specified.
TITAN Cargo MC 10W40	10W40		867	100	14,5	146	-42	220	Long life and fuel economy oil for high speed diesel engines with outstanding cold start performance.
TITAN 2T 100S			876	47,5	8,44		-42	130	High performance 2-Stroke engine oil, burns without leaving deposits on the spark plug. Best adapted for Outboard engines. TC-W3.
LATITUDE 2T Special			871	37	6,5	128	-45	108	

	Grade	TAN	Density	Kinematic Viscosity		VI	Pour Point	Flash Point	Application
	ISO VG	mgKOH/g	kg/m ³	15°C	cSt at 40°C		cSt at 100°C	°C	
Gear Oils									
RENOLIN CLP 68	68	0,6	886	68	8,7	99	-24	236	High performance gear oils with outstanding extreme pressure characteristics and load carrying capacity. Recommended for spur-, helical- and bevel enclosed gears with circulation or splash lubrication. Operating temperatures up to 100°C and peaks above 120°C. RENOLIN CLP oils can be used for all applications where CLP oil according DIN51517-3 are recommended. These products meet and exceed all up to date requirements of the well known gear and bearing manufacturers. CKC/CKD according ISO12925-1.
RENOLIN CLP 100	100	0,6	890	100	11,2	98	-24	240	
RENOLIN CLP 150	150	0,6	894	150	14,5	94	-24	250	
RENOLIN CLP 220	220	0,6	896	220	18,9	96	-24	260	
RENOLIN CLP 320	320	0,6	900	320	24	95	-14	255	
RENOLIN CLP 460	460	0,6	901	460	30,4	95	-12	270	
RENOLIN CLP 680	680	0,6	918	680	36,8	88	-10	270	
TITAN Supergear 80W90		1	890	134	14,4	108	-27	220	Mineral universal gear oil for transmission and axle gearboxes. For usage on Outboard motors. SAE 80W90 classified.
Transmission Fluid									
TITAN ATF 4000			862	37,8	7,6	174	-50	190	Multi purpose transmission fluid, recommended whenever DEXRON III performance is required.

	Grade	TAN	Density	Kinematic Viscosity		VI	Pour Point	Flash Point	Application
	ISO VG	mgKOH/g	kg/m ³	15°C	cSt at 40°C		cSt at 100°C	°C	
Turbine Oils									
RENOLIN Eterna 32	32	0,12	842	32	5,6		-15	220	New generation turbine oil for gas, steam and expansion turbines as well as turbo chargers.
RENOLIN Eterna 46	46	0,12	846	46	7,6		-15	220	
RENOLIN Eterna 68	68	0,12	851	68	9,9		-15	230	

	Grade	TAN	Density	Kinematic Viscosity		VI	Pour Point	Flash Point	Application
	ISO VG	mgKOH/g	kg/m ³	15°C	cSt at 40°C		cSt at 100°C	°C	
Heat Transfer Oils									
ASSISTO THERM 5	32	<0,05	870	30,5	5,3		-12	210	High performance heat transfer fluid for the use in closed heat transfer systems with or without forced circulation. According Q DIN 51522.
RENOLIN Therm 320	32		870	43,7	6,5		-12	225	
ASSISTO THERM IT	15	<0,05	840	14	3		-42	185	Heat transfer oil with exceptional low temperature properties.

	Grade	TAN	Density	Kinematic Viscosity		VI	Pour Point	Flash Point	Application
	ISO VG	mgKOH/g	kg/m ³	15°C	cSt at 40°C		cSt at 100°C	°C	
Air Compressor Oils									
RENOLIN 503	68	0,1	878	68	8,6	97	-12	248	VDL-Air compressor oils according DIN 51506 for piston and rotation compressors. For final compression temperatures up to 220°C. This products are based on special mineral oils.
RENOLIN 504	100	0,1	880	96	10,8	95	-12	255	
RENOLIN 505	150	0,1	888	154	14,4	90	-9	258	

	Grade	TAN	Density	Kinematic Viscosity		VI	Pour Point	Flash Point	Application
	ISO VG	mgKOH/g	kg/m ³	15°C	cSt at 40°C		cSt at 100°C	°C	
Refrigeration Oils									
RENISO KM 32	32	0,01	881	32	4,9	63	-45	202	Special naphtenic refrigeration oils for the usage with Ammonia NH ₃ (R717) and CFC/HCFC (R12/R22) refrigerants in open, semi-hermetic and hermetic compressors.
RENISO KS 46	46	0,01	895	46	5,8	47	-42	195	
RENISO KC 68	68	0,01	900	68	7,2	45	-39	200	

SECONDARY GRADES

MINERAL OILS

	Grade	TAN	Density	Kinematic Viscosity		VI	Pour Point	Flash Point	Application
	ISO VG	mgKOH/g	kg/m ³	15°C	cSt at 40°C		cSt at 100°C	°C	
Hydraulic Oils									
RENOLIN B 15 HVI	15	0,5	859	15	3,8	151	-45	180	Multigrade hydraulic fluids for usage in a wide temperature range and severe load conditions. Also suitable for general lubrication of bearings and gearboxes when a high viscosity index and good load carrying capacity is required. DENISON HFO approved.
RENOLIN B 22 HVI	22	0,5	866	22	4,9	156	-45	175	
RENOLIN B 32 HVI	32	0,5	871	32	6,3	152	-48	178	
RENOLIN B 46 HVI	46	0,5	879	46	8,1	149	-45	186	
RENOLIN B 68 HVI	68	0,5	868	68	11	153	-33	240	
RENOLIN B 100 HVI	100	0,5	871	100	13,5	140	-24	240	
RENOLIN B 150 HVI	150	0,5	881	150	17,7	130	-24	260	
Low Temperature Hydraulic Oils									
RENOLIN MR 310	15	0,5	855	15	5,5	370	-48	120	Multigrade oil for hydraulic systems, bearings and transmissions with excellent low temperature behaviour. Extremely high viscosity index.
RENOLIN MR 520	32	0,5	867	32	9	270	-60	170	

SYNTHETIC OILS, SPECIALITIES AND GREASES

	Grade	TAN	Density	Kinematic Viscosity		VI	Pour Point	Flash Point	Application
	ISO VG	mgKOH/g	kg/m ³	cSt at 40°C	cSt at 100°C		°C	COC in °C	
Gear Oils									
RENOLIN Unysyn CLP 220	220	0,6	852	220	25,7	148	-45	260	Fully synthetic gear oils based on polyalphaolefin for application where a high lifetime CLP-HC type according DIN 51517-3 is required.
RENOLIN Unysyn CLP 320	320	0,6	860	320	35	155	-42	260	

	Grade	TAN	Density	Kinematic Viscosity		VI	Pour Point	Flash Point	Application
	ISO VG	mgKOH/g	kg/m ³	cSt at 40°C	cSt at 100°C		°C	COC in °C	
Air Compressor Oils									
RENOLIN Unysyn OL 46	46	0,1	843	46	7,9	146	< -60	260	Synthetic PAO Compressor oil for usage in flooded or oil injection screw type air compressors.
RENOLIN Unysyn OL 68	68	0,1	845	68	10,6	144	< -60	265	

NAVISYN DE 100	100		961	97	9,3	80	-35	274	Synthetic ester based air compressor oil for usage in reciprocating, rotary and screw compressors dependent upon viscosity requirements.
RENOLIN SE 100	100		987	107	10,7	80	-36	268	

	Grade	TAN	Density	Kinematic Viscosity		VI	Pour Point	Flash Point	Application
	ISO VG	mgKOH/g	kg/m ³	cSt at 40°C	cSt at 100°C		°C	COC in °C	
Refrigeration Oils									
RENISO Triton SEZ 32	32	0,03	1007	32	6,1	141	-48	240	Chlorine free, Polyolester based refrigerating oils for the usage with chlorine free HFC refrigerants as R134a, R404A, R410A etc. Depending on the viscosity RENISO Triton can be used on hermetical, semi hermetical and open piston compressors as well as screw type and turbo compressors. The product has excellent compability with elastomeres and all materials used in refrigeration circuits.
RENISO Triton SE 55	55	0,03	1009	55	9	143	-51	270	
RENISO Triton SEZ 68	68	0,03	973	65,6	9,5	125	-45	258	
RENISO Triton SEZ 100	100	0,03	965	100	11,8	107	-39	288	
RENISO Triton SE 170	170	0,03	972	173	17,6	111	-24	260	
RENISO Triton SE 220	220	0,01	980	235	20,7	103	-27	285	

RENISO S 68	68	0,01	869	68	6,2		-33	188	Alkylbenzene-based synthetic refrigerating oil for chlorine containing refrigerants as R22, R502, R401A/B, R402A/B in addition to usage with iso-buthane (R600a) and propane (R290). RENISO S 68 can also be used for NH ₃ (R717).
RENISO SP 100	100	0,01	871	100	7,9		-24	190	

	Grade	TAN	Density	Kinematic Viscosity		VI	Pour Point	Flash Point	Application
	ISO VG	mgKOH/g	kg/m ³	cSt at 40°C	cSt at 100°C		°C	COC in °C	
Gas Compressor Oil									
RENOLIN LPG 185	185	0,6	1012	185	29,1	197	-36	280	High performance gas compressor oil based on polyalkylene glycol. Usage with hydrocarbon chemical gases (propane, butane, ethylene and mixtures), petroleum gases and natural gases with a high amount of methane as well as other chemical gases (NH ₃ , butadiene). The oil is applicable on piston, screw and vane compressors.

	Grade	TAN	Density	Kinematic Viscosity		VI	Pour Point	Flash Point	Application
	ISO VG	mgKOH/g	kg/m ³	cSt at 40°C	cSt at 100°C		°C	COC in °C	
Stern Tube Oil									
RENOLIN CLP 220 Plus	220	0,7	899	220	18,9	96	-24	260	Emulgating Stern Tube Oil, Provides 95% of Load capacity when mixed with 5% Water.

	Grade	TAN	Density	Kinematic Viscosity		VI	Pour Point	Flash Point	Application
	ISO VG	mgKOH/g	kg/m ³	cSt at 40°C	cSt at 100°C		°C	COC in °C	
Rapidly Biodegrading Hydraulic Oils									
PLANTOSYN 46 HVI	46	0,4	905	46	8,1	150	-33	290	High performance, rapidly biodegrading hydraulic and lubricating oils based on saturated synthetic esters. Fully compliant with ISO15380: HEES and OECD-Guideline 301C. ISO VG 46 holding the German "Blue Angel" eco label. Also applicable for high loaded gears with FZG-Stage >12.
PLANTOSYN 68 HVI	68	0,4	916	67	10,1	153	-33	290	

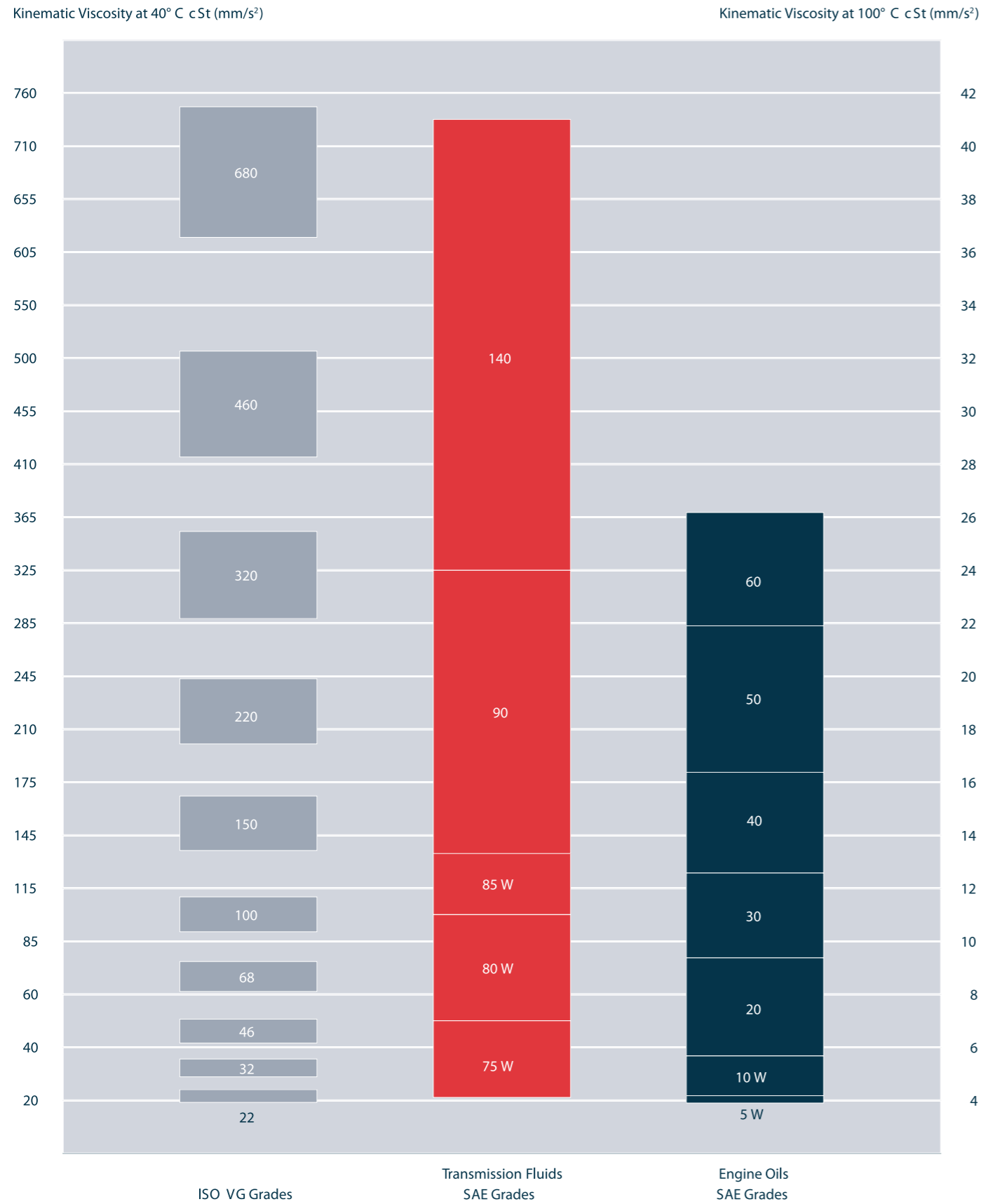
	Grade	TAN	Density	Kinematic Viscosity		VI	Pour Point	Flash Point	Application
	ISO VG	mgKOH/g	kg/m ³	cSt at 40°C	cSt at 100°C		°C	COC in °C	
Rapidly Biodegrading Gear Oils									
PLANTOGEAR 100 S	100	1	936	100	15,8	170	-51	>280	High performance, rapidly biodegrading synthetic ester based gear oil, PLANTO-GEAR S oils are fully compliant with the DIN 51 517-3 standard and are Flender approved.
PLANTOGEAR 150 S	150	1	943	150	21	165	-45	>280	
PLANTOGEAR 220 S	220	1	951	220	27,4	160	-48	>280	

	NLGI Grade	Dropping Point	Temperature Range	Base Oil Viscosity	Color	Thickener	Application
		°C	°C	cSt at 40°C			
Greases							
NAVIGREASE CSX 2	2	>280	-20 to +160	200	brown	Ca sulponate complex	Multi purpose grease for all points requiring a high performance concerning water resistance, working stability, EP and AW properties.
RENOLIT CXI 2	2	>270	-20 to +160	350	brown	Ca sulponate complex	
NAVIGREASE EP 2	2	>195	-20 to +120	200	brown	lithium	For plain and roller bearings under high load in humid atmosphere.
RENOLIT FLM 2	2	>180	-30 to +140	100	black	lithium with MoS ₂	For plain and roller bearings with extended re-greasing intervals.
RENOLIT H 443-HD88	2-3	>180	-30 to +140	130	green	lithium	For plain and roller bearings under high load in humid atmosphere.
RENOLIT EP X1 PBF	1	>170	-15 to +120	1050	black	lithium	Coupling grease with outstanding performance on high rotation speeds due to exceptional basoil viscosity.
RENOLIT CX-EP 0	0	>250	-30 to +140	120	brown	Ca sulponate complex	For usage on bearing points and gears, stressed by temperatures and pressure.
RENOLIT LZR 000	00/000	>160	-40 to +110	43	green	lithium calcium	For usage in centralised lubrication systems.

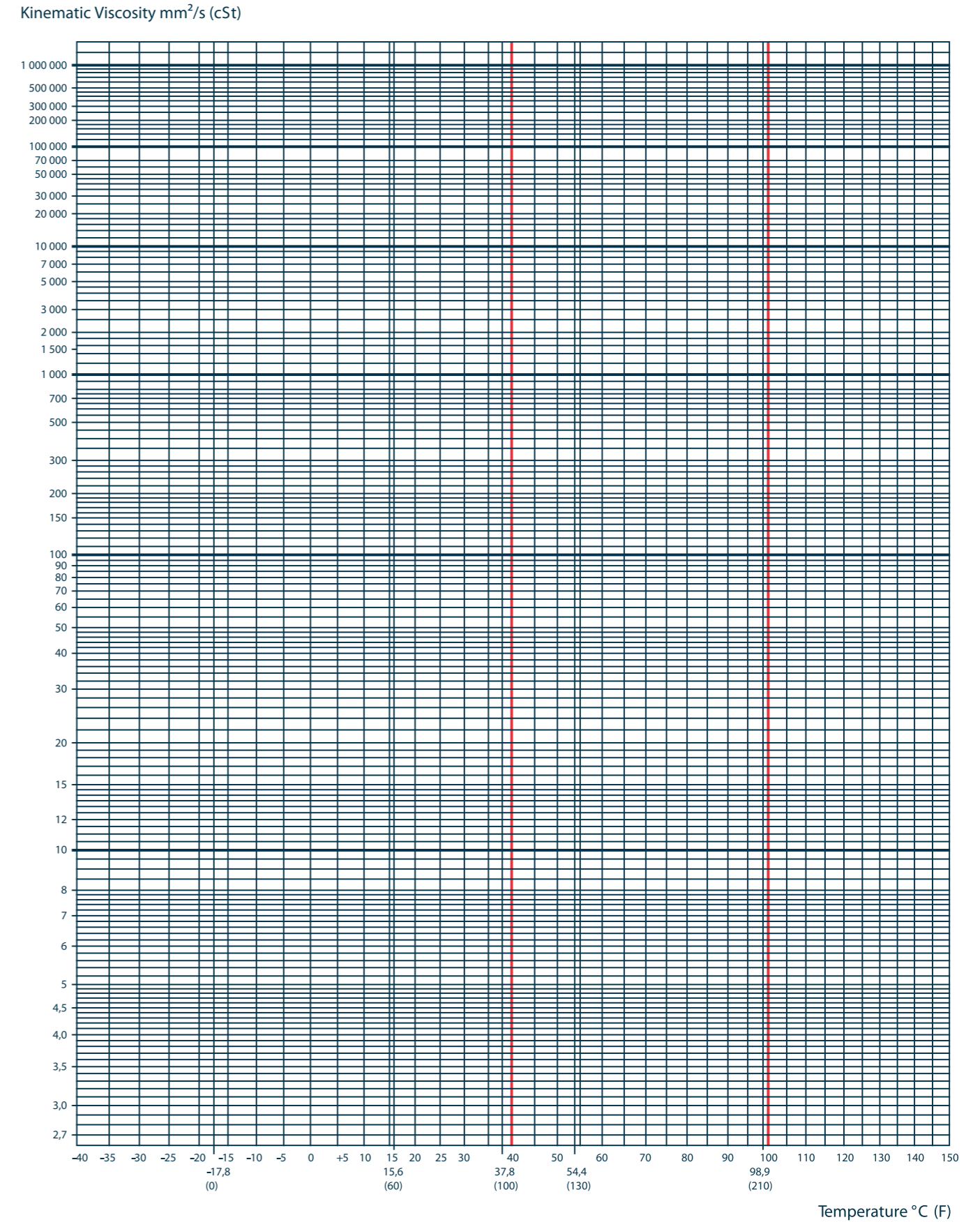
Rapidly biodegrading Grease							
PLANTOGEAL 2S	2	>170	-40 to +120	105	white	lithium calcium	Environmentally harmless EP grease, based on biodegrading synthetic esters, Excellent performance on wire ropes, compliant with latest US regulations.

	Grade	TAN	Density	Kinematic Viscosity		VI	Pour Point	Flash Point	Application
	ISO VG	mgKOH/g	kg/m ³	cSt at 40°C	cSt at 100°C		°C	COC in °C	
Corrosion Protection									
ANTICORIT DFW 8310			811					65	Barium free corrosion preventive and dewatering fluid leaving a waxy film – based on iso-paraffin as solvent.

VISCOSITY CLASSIFICATION



VISCOSITY – TEMPERATURE DIAGRAM



Note The kinematic viscosity at 40°C and 100°C are related horizontally for 95 VI Oils. The SAE specifications are at 100°C only and Multigrade Oil viscosities are not representative at other temperatures.