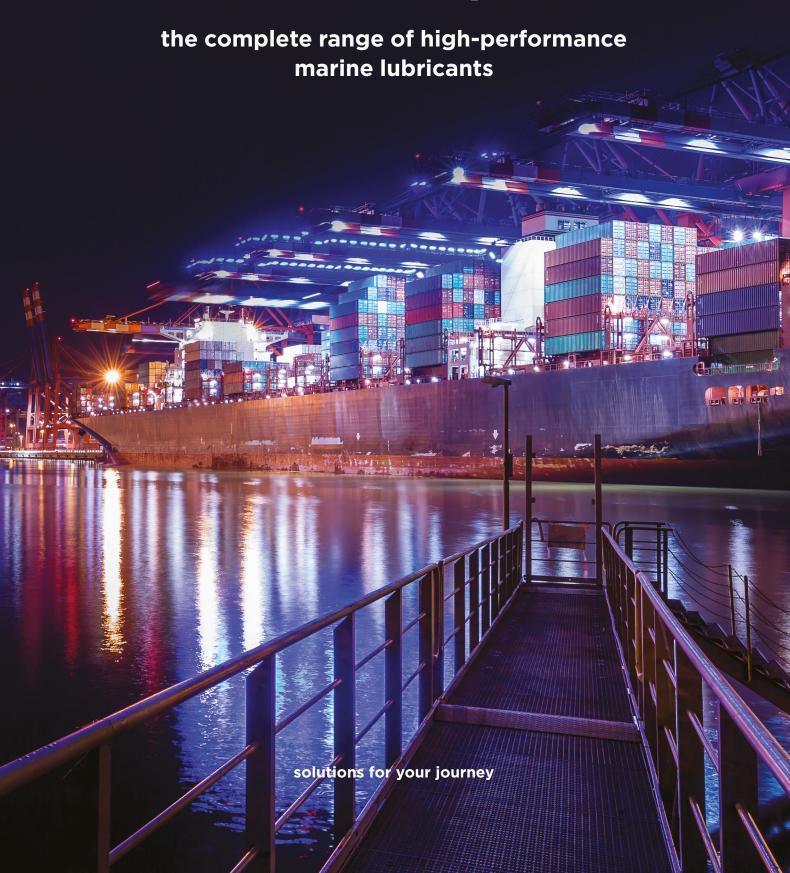


marine lubricants product list





We have regulation-ready, tailor-made solutions covering almost every compliant fuel requirement, delivering peace of mind whichever operational route you choose, wherever in the world you are.

Chevron products are subject to extensive field tests, and are designed to meet or exceed original engine manufacturer requirements. Supply is available at major ports all around the globe. The following table gives a brief description and typical physical properties of each product. For more details, please refer to individual product information at chevronmarine products.com, or contact your local Chevron representative or marketing office.

Product List

	SAE or Density		Kinematic Viscosity mm ² /s (cSt) @		Viscosity	Flash Point	Pour Point	Base No.	
	ISO VG	15°C kg/l	40°C	100°C	Index	°C	°C	(BN)	Product Description
Slow-speed Engine Oils									
Taro® Ultra Advanced 40	50	0.92	-	19.0	>95	220	-15	40	High performance 40BN SAE 50 CAT II cylinder oil for engines operating on LVLSFO, ULSFO, LNG and methanol.
Taro® Ultra 40	50	0.92	_	19.0	>95	270	-15	40	High performance 40BN SAE 50 cylinder oil for engines operating on LSFO and distillate fuel single grade for 0.50% sulphur. Additionally for the use of intermittent ECA fuel and permanent methanol.
Taro® Ultra 70	50	0.93	_	19.0	>95	270	-15	70	High performance 70BN SAE 50 cylinder oil for a wide range of fuels.
Taro® Ultra 100	50	0.95	-	19.0	>95	270	-15	100	High performance 100BN SAE 50 cylinder oil, the optimal choice for most slow-speed vessels. Optimized to combat cold corrosion in two-stroke engines. Designed for high sulphur HFO and scrubber operations.
Taro® Ultra 140	50	0.98	-	19.0	>95	270	-15	140	High performance 140BN SAE 50 cylinder oil optimized to also combat cold corrosion and lower feed rates in two-stroke engines. Designed for cost performance optimization with scrubbers.
Veritas® 800 Marine 30	30	0.89	94.0	10.7	98	240	-18	6	Large bore two-stroke slow speed engine system oil.
Medium-speed Engine Oils									
Delo® 1000 Marine 30	30	0.89	102.0	11.6	100	240	-18	12	Medium-speed engine oil. Fuel sulphur level up to 1.5%.
Delo® 1000 Marine 40	40	0.89	135.0	14.0	100	240	-18	12	Medium-speed engine oil. Fuel sulphur level up to 1.5%.
Delo® SHP SAE 40	40	0.89	135.0	14.0	100	240	-18	12	High performance SAE 40 diesel engine oil for medium- and high-speed trunk piston diesel engines operating under severe conditions.
HDAX® 5200 Low Ash Gas Engine Oi	I SAE 40 40	0.88	124.0	13.5	104	260	-33	4	High performance low ash gas engine oil.
HDAX* 9700 SAE 40	40	0.87	116.0	13.4	110	268	-36	6	High performance low ash dual fuel gas engine oil.
Taro® 20 DP 30 (X)*	30	0.90	94.0	11.0	102	240	-12	20	Medium-speed engine oil. Fuel sulphur level up to 2%.
Taro® 20 DP 40 (X)*	40	0.90	135.0	14.0	100	240	-12	20	Medium-speed engine oil. Fuel sulphur level up to 2%.
Taro® 30 DP 30 (X)*	30	0.91	94.0	11.0	104	240	-12	30	Medium-speed engine oil. Fuel sulphur level up to 4%.
Taro® 30 DP 40 (X)*	40	0.91	135.0	14.0	104	240	-12	30	Medium-speed engine oil. Fuel sulphur level up to 4%.
Taro® 40 XL 40 (X)*	40	0.90	135.0	14.0	106	240	-12	40	Medium-speed engine oil. Fuel sulphur level up to 4.5%.
Taro [®] 50 XL 40 (X)*	40	0.91	135.0	14.0	106	240	-12	50	Medium speed engine oil. Fuel sulfur level up to 4.5%. Suitable for operation on fuel of high sulfur content in combination with a low natural engine oil consumption.
High-speed Engine Oils									
Delo* 100 SAE 40	40	0.89	131.0	14.5	109	270	-24	7	Low ash, two-stroke diesel engine oil for Detroit Diesel engines.
Delo® 400 MGX SAE 15W-40	15W-40	0.88	_	14.6	-	228	-33	10	High-speed diesel engine oil with low saps. API CJ-4 performance.
Delo® 400 RDS SAE 10W-40	10W-40	0.87	100.0	15.0	154	236	-42	10	High performance semi-synthetic heavy duty engine oil.
Delo® 400 SAE 40	40	0.89	_	14.7	_	>220	-24	10	Monograde of SAE 40 viscosity for four-stroke trunk piston engine on light fuels.
Delo® 400 XSP SAE 5W-40	5W-40	0.85	-	15.4	_	223	-46	10	$\label{thm:mixed-fleet} \textbf{Mixed-fleet engine oil for naturally aspirated and turb och arged four-stroke diesel and gas oline engines.}$
Delo® 710 LS SAE 20W-40	20W-40	0.88	140.8	15.5	102	265	-33	11	Premium diesel engine oil, zinc and chlorine-free.
Delo® Gold Ultra SAE 15W-40	15W-40	0.88	115.4	15.1	138	230	-35	10	Standard mineral multi-grade four-stroke trunk piston engine oil on light fuels.

^{*} Depending on the port designated, products may be delivered with or without the (X) identifier (e.g., Taro* 40 XL 40X or Taro* 40 XL 40). However, the product typical test data both with or without the (X) identifier are miscible and fully compatible.

	SAE or	Density	Kinematic \ mm²/s (c	:St) @	Viscosity	Flash Point	Pour Point	Base No.	
	ISO VG	15°C kg/l	40°C	100°C	Index	°C	°C	(BN)	Product Description
Compressor Oils									Cathalia (DAO haadh) hairin all fautha hairin a faranna an dia a firancia a d
Capella® A 68	68	0.84	68.7	10.6	143	260	-57	-	Synthetic (PAO-based) lubricating oil for the lubrication of compressors used in refrigeration and air-conditioning systems with ammonia, carbon dioxide and halogenated refrigerants.
Capella® HFC 32	32	1.00	32.0	5.7	141	240	-57	_	Refrigeration compressor oil, for chlorine-free refrigerants such as R134a, R404a, and R507.
Capella® HFC 55	55	1.01	53.0	8.4	137	240	-48	_	Refrigeration compressor oil, for chlorine-free refrigerants such as R134a, R404a, and R507.
Capella® HFC 68	68	0.97	68.0	8.9	104	250	-39	_	Refrigeration compressor oil, for chlorine-free refrigerants such as R134a, R404a, and R507.
Capella® HFC 100	100	0.97	100.0	11.4	100	266	-30	_	Refrigeration compressor oil, for chlorine-free refrigerants such as R134a, R404a, and R507.
Capella® HFC 170	170	0.97	173.0	17.1	106	260	-27	_	Refrigeration compressor oil, for chlorine-free refrigerants such as R134a, R404a, and R507.
Capella® HFC 220	220	0.98	220.0	19.0	98	294	-27	_	Refrigeration compressor oil, for chlorine-free refrigerants such as R134a, R404a, and R507.
Capella® Low Temp AB 68	68	0.87	68.0	6.5	-	190	-42	-	Synthetic (alkylbenzene based) refrigeration compressor oil for ammonia and R22 or R502 at low evaporator temperatures.
Capella® WF 32	32	0.90	33.2	4.4	6	175	-45	_	Refrigeration compressor oil, for ammonia, methylchloride, CO_2 and certain types of (H)CFC refrigerant gases.
Capella® WF 68	68	0.91	69.5	6.5	13	185	-39	_	Refrigeration compressor oil, for ammonia, methylchloride, CO_2 and certain types of (H)CFC refrigerant gases.
Cetus® DE 100	100	0.96	96.0	10.1	92	252	-39	_	Synthetic (diester based) lubricating oil for reciprocating air compressors.
Cetus® PAG	-	1.06	185.0	35.0	250	260	-30	_	Synthetic (PAG based) lubricating oil for chemical & hydrocarbon gas compressors (including LNG & LPG).
Cetus® PAO 46	46	0.84	46.0	8.1	136	250	-46	_	Synthetic (PAO-based) lubricating oil for rotary air compressors.
Cetus® PAO 68	68	0.85	68.0	10.4	141	240	-47	_	Synthetic (PAO-based) lubricating oil for rotary air compressors and turbochargers.
Cetus® VDL 100	100	0.87	100.0	11.5	103	258	-15	_	High performance lubricating oil for reciprocating air compressors.
Auxiliary Products									
1000 THF®	_	0.87	59.0	9.5	145	283	-46	_	High quality, multifunctional tractor hydraulic fluid.
Delo® Gear EP-5 SAE 80W-90	_	0.89	135.0	14.2	>95	>180	-33	_	Automotive gear lubricant suitable for API GL-5 applications.
Havoline® Super Outboard 3	_	0.86	56.2	91.6	_	102	-39	_	Two-stroke marine outboard oil, formulated with an ashless additive system.
Texatherm® 32	32	0.86	32.0	5.5	106	220	-15	_	Heat transfer fluid for temperatures up to 320°C (max. film temperature 340°C).
Texatherm® 46	46	0.86	46.0	6.9	105	235	-15	_	Heat transfer fluid for temperatures up to 320°C (max. film temperature 340°C).
Texamatic® 1888	-	0.85	35.8	7.3	165	233	-51	_	Automatic transmission fluid.
Texamatic 1000			rage Drop Point		nsity	Flash Point		1ax Operating	Automatic transmission mad.
	Appeara	nce	°C	15°	C kg/l	°C		Temp °C	Product Description
Auxiliary Products									
Rust Proof Compound L®	Soft, brown	ı, solid	25	0	.89	74	-[50 to 150	Soft film rust preventive for relatively long-term protection of iron and steel components.
	SAE or	Density	Kinematic V mm ² /s (c	:St) @	Viscosity	Flash Point	Pour Point	Base No.	
	ISO VG	15°C kg/l	40°C	100°C	Index	°C	°C	(BN)	Product Description
Gear Oils									
Meropa® 68	68	0.88	68.0	8.8	100	200	-15	_	Extreme pressure industrial gear lubricant.
Meropa® 100	100	0.88	100.0	11.4	100	200	-15	_	Extreme pressure industrial gear lubricant.
Meropa® 150	150	0.89	150.0	14.9	100	215	-15	_	Extreme pressure industrial gear lubricant.
Meropa® 220	220	0.89	220.0	19.2	100	215	-15	_	Extreme pressure industrial gear lubricant.
Meropa® 320	320	0.90	320.0	24.3	100	215	-15	_	Extreme pressure industrial gear lubricant.
Meropa® 460	460	0.90	460.0	30.0	100	215	-15	_	Extreme pressure industrial gear lubricant.
Meropa® 680	680	0.90	680.0	36.5	95	240	-10	_	Extreme pressure industrial gear lubricant.
Meropa® EliteSyn WS 150	150	1.05	150.0	25.0	227	284	-42	_	Premium performance synthetic industrial gear oil (PAG based).
Meropa® EliteSyn WS 220	220	1.06	220.0	42.0	241	284	-42	-	Premium performance synthetic industrial gear oil (PAG based).
Meropa® EliteSyn WS 460	460	1.07	460.0	83.0	262	284	-36	-	Premium performance synthetic industrial gear oil (PAG based).
Meropa® EliteSyn WS 680	680	1.07	680.0	122.0	272	284	-33	-	Premium performance synthetic industrial gear oil (PAG based).
Meropa® EliteSyn XM 150	150	0.89	150.0	20.6	160	237	-36	_	Premium performance synthetic industrial gear oil.
Meropa® EliteSyn XM 220	220	0.88	220.0	27.5	160	239	-36	-	Premium performance synthetic industrial gear oil.
Meropa® EliteSyn XM 320	320	0.89	320.0	36.2	160	242	-36	_	Premium performance synthetic industrial gear oil.
Meropa® MG 100	100	0.89	100.0	11.3	99	234	-24	_	High-performance gear oil for marine clutched gear systems.
Meropa® MG 150	150	0.90	150.0	14.8	98	254	-25	_	High-performance gear oil for marine clutched gear systems.
Meropa® MG 220	220	0.90	220.0	19.0	97	268	-26	_	High-performance gear oil for marine clutched gear systems.
Meropa® XL 320	320	0.88	320.0	29.1	124	250	-30	_	Premium high-performance gear oil.

			ic Viscosity				_	
		Density mm ² /5 5°C kg/l 40°C	s (cSt) @ 100°C	Viscosity I	Flash Point I	Pour Point °C	Base No. (BN)	Product Description
Hydraulic Oils	150 40	3 C kg/1 40 C	100 C	muex			(DIV)	Froduct Description
Clarity® EliteSyn AW 32	32	0.85 33.0	7.1	191	216	-52	_	Zinc-free and ashless hydraulic fluid (environmentally sensitive areas).
Clarity® EliteSyn AW 46	46	0.85 46.3	9.2	184	234	-32 -47	_	Zinc-free and ashless hydraulic fluid (environmentally sensitive areas).
Clarity® EliteSyn AW 68	68	0.85 68.0	11.5	164	246	-44	_	Zinc-free and ashless hydraulic fluid (environmentally sensitive areas).
Hydraulic Oil 5606®	15	0.88 15.0	5.5	338	82	-63	_	High performance general purpose red-dyed hydraulic oil.
Rando® HDZ 15	15	0.89 15.7	3.9	155	144	-60	_	High VI hydraulic oil.
Rando® HDZ 22	22	0.89 13.7	5.1	165	164	-58	_	
Rando® HDZ 32	32	0.86 33.5	6.3	151	204	-56 -49	_	High VI hydraulic oil. High VI hydraulic oil.
	46			151		-49 -47	_	•
Rando® HDZ 46 Rando® HDZ 68		0.87 47.0	8.2 11.0	152	215 222		_	High VI hydraulic oil.
	68	0.87 69.6				-42		High VI hydraulic oil.
Rando® HDZ 100	100	0.87 100.5	14.2	139	236	-37	_	High VI hydraulic oil.
Turbine Oils								
GST® Advantage RO 32	32	0.86 34.2	5.5	>95	>215	>-9	-	Premium turbine oil for special Mitsubishi application under MS04-MA-CL002.
Regal R&O® 32	32	0.88 30.4	5.2	100	220	-15	_	Marine turbine oil, including gas turbines.
Regal R&O® 46	46	0.87 43.7	6.5	98	224	-15	-	Marine turbine oil, including gas turbines.
Regal R&O® 68	68	0.86 64.6	8.4	99	245	-15	-	Marine turbine oil, including gas turbines.
Regal R&O® 100	100	0.88 95.0	10.8	97	215	-15	-	ISO VG 100 turbine oil for steam and hydroelectric turbines.
Regal EP® 150	150	0.89 150	14.6	95	260	_	-	Steam, hydraulic and gas turbine oil.
Regal SGT® 22	22	- 25.6	5.1	123	270	-57	_	Designed for use in modified aviation type gas turbines in non-aviation stationary applications such as industrial power generation and marine service.
	Thickener	Color	Penetration worked at 25°C	Average Drop Point °C	Min/Max Operating Temp °C	NGLI-CI	lass De	escription/Application
Greases								
Black Pearl® SRI 2	Polyurea	Dark Green	280	243	-20 to 140		th	pecially formulated grease containing a highly refined paraffinic base oil, synthetic polyurea ashless organic nickener and high-performance rust and oxidation inhibitors.
Marfak® XD 2 M3	Calcium	Black	280	88	-10 to 60	2		alcium grease with graphite and MoS₂ for open gears, wire ropes & general grease points of deck equipment.
Multifak® CG	Lithium	Dark Brown	330	215	-10 to 120			tacky lithium grease specifically designed for lubrication of industrial flexible couplings.
Multifak® EP 0	Lithium	Light Brown	370	180	-30 to 120			lulti-purpose EP grease for general applications.
Multifak® EP 1	Lithium	Amber to Brown	325	195	-30 to 120	1	M	lulti-purpose EP grease for general applications.
Multifak® EP 2	Lithium	Brown	280	195	-30 to 120		M	lulti-purpose EP grease for general applications.
Multifak® EP 3	Lithium	Amber to Brown	235	205	-30 to 120	3	M	lulti-purpose EP grease for general applications.
Multifak® EP 2 M3	Lithium	Dark Grey	280	210	-25 to 120	2	M	lulti-purpose EP grease for general applications.
Starplex® EP 2	Lithium Complex	Dark Red	280	230+	-35 to 140	2	M	lulti-purpose EP grease for general applications.
Starplex® HM 3	Lithium Complex	Brown	220-250	>250	-20 to 150		ap	igh performance multipurpose grease, formulated for long-term service in roller-and ball-bearing pplications, operating at high temperatures and under high loads.
Starplex® Syn HD 1.5	Lithium Complex	Light Tan	315	280	-30 to 230	1.5	Sy	ynthetic multi-purpose and high-performance grease for high and low temperature applications.
		Kinematic Viscosity mn			Flash	Pour		
	ISO VG	40°C	100°C V	iscosity Index	Point °C	Point °	C De	escription/Application
Environmentally Acceptable Lubricants [†]								
Clarity® Bio Elitesyn AW 32	32	32.0	6.5	160	235	-42	Е	Environmentally Acceptable, VGP compliant, Ashless hydraulic oil.
Clarity® Bio Elitesyn AW 46	46	46.0	8.2	160	252	-33		Environmentally Acceptable, VGP compliant, Ashless hydraulic oil.
Clarity® Bio Elitesyn AW 68	68	68.0	11.9	160	237	-33		Environmentally Acceptable, VGP compliant, Ashless hydraulic oil.
Clarity® Synthetic EA Hydraulic Oil 68	68	68.0	11.7	170	193	-48		Environmentally Acceptable, VGP compliant hydraulic.
Clarity® Synthetic EA Hydraulic Oil 100	100	100.0	18.8	210	193	-48		Environmentally Acceptable, VGP compliant hydraulic and stern tube oil.
	_50							
	68	68.0	12.0	175	180	-42	F	nyironmentally Acceptable, VGP compliant gear oil.
Envirologic® GO 68	68 100	68.0 100.0	12.0 18.0	175 175	180 180	-42 -39		Environmentally Acceptable, VGP compliant gear oil.
	68 100 150	68.0 100.0 150.0	12.0 18.0 23.0	175 175 175	180 180 180	-42 -39 -39	E	Environmentally Acceptable, VGP compliant gear oil. Environmentally Acceptable, VGP compliant gear oil. Environmentally Acceptable, VGP compliant gear oil.

	Thickener	Color	Penetration worked at 25°C	Average Drop Point °C	Min/Max Operating Temp °C	NGLI-Class	Description/Application		
Environmentally Acceptable Greases									
Marfak® Bio Elitesyn HD 0	Anhydrous Calcium	Yellow	355-385	140	-50 to 100	0	High-performance, biodegra	idable EAL grea	ses that offers excellent adhesion and water resistance.
Marfak® Bio Elitesyn HD 2	Anhydrous Calcium	Yellow	265-295	140	-40 to 120	2	High-performance, biodegra	idable EAL grea	ses that offers excellent adhesion and water resistance.
	Base	Density at 20°C kg/l	Concentration (In water) %	Freeze Protection °C	Toxic Classification	Seal Compatibi	Content on Nitrite; Amine Phosphate lity Borate, Silicate	Color	Description/Application
Cooling Water Treatments									
Delo® XLC	Ethylene-Glycol based Carboxylic Acid	1.11	50	-37	Harmful	No adver		Orange	Long-life protection against freezing, boiling, corrosion ^t .
Delo® XLI	Water-based Carboxylic Acid	1.06	5-10	Nil	Low	hoses & ga: material		Green	Long-life corrosion protection ^t .

[‡] Chevron's proprietary inhibitor technology operates by attacking free radical sites on the metal surface and sealing them before corrosion begins, also providing a very efficient heat transfer.

Authorized users can use this Internet-based ordering system to check prices at

different ports, place orders and track deliveries through the various stages of supply.

The data contained in the tables above are typical values shown for information only and may vary from location to location. Consult your original equipment manufacturer for recommendations about selecting the appropriate product for your equipment.

Additional Services

OnePort™

FAST™ Service	Contracted customers have access to FAST™, a comprehensive equipment condition monitoring program which reports the condition of oil in service and plots the trends of important properties of the oil.	DOT.FAST® Service	Contracted customers have access to DOT.FAST*, a complete service including the Drip Oil Analyzer for onboard testing of used cylinder drain oil samples (drip oil) and regular laboratory analysis with expert advice from experienced engineers. Drip Oil Analysis
Lubrication Charts	Each contracted vessel has a detailed lubrication chart, listing all onboard equipment, lubricants, and the suggested application based on manufacturers' recommendations.		is recommended by the major slow-speed engine builders to better understand pist running conditions in the engine.
	Our system enables authorized users to access details on the Internet.	Vessel	To protect the equipment that drives your business, Chevron has developed a vessel
OmeDentM	A district of a construction of the labour of the condition of the condition of the condition of the condition of	Optimization	optimization support program — supported by our industry-experienced technical field

staff and lubricants analysis experts — providing advice to reduce your total cost of

to find out how Chevron Marine Products can optimize your operation.

operation, maximizing uptime and improving reliability. Contact your account manager

Comparative Viscosity Classifications

