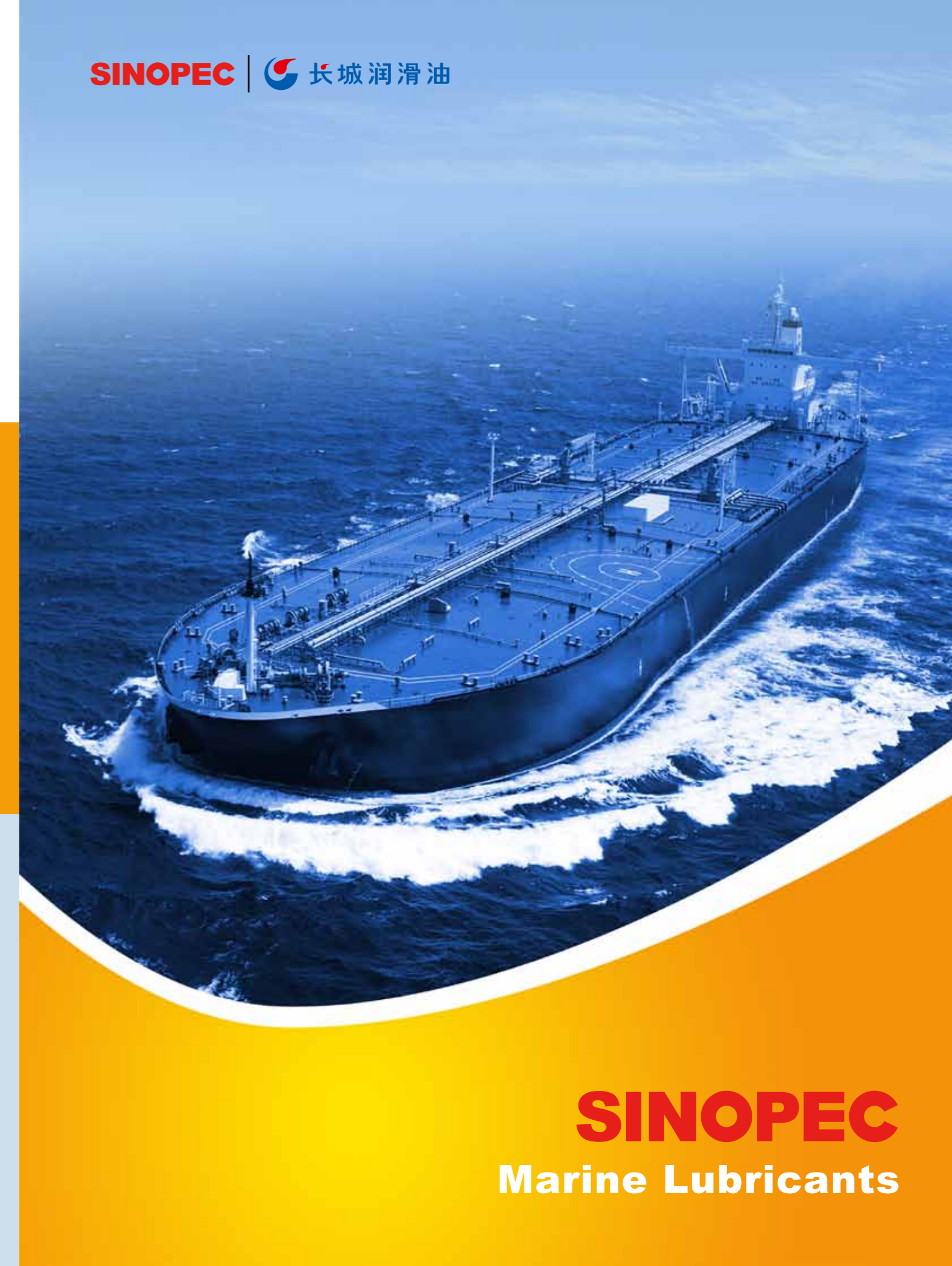


Product List-Grease

Products	Operating Temperature, °C	Penetration Worked at 25°C, 0.1mm	Dropping Point °C	Oil Separation (100°C, 24h) %	EP Properties (Four ball test) P _B , N	Product Characteristics/ Applications
SINOPEC Super Grease № 2	-20 - 160	283	330	1.1	4905	Calcium sulfonate grease with EP, water resistant, anti-rust and high temperature properties.
SINOPEC EP Lithium Complex Grease № 2	-20 - 160	274	300	2.2	3923	Complex grease with high and low temperature applications
SINOPEC EP Lithium Grease № 2	-20 - 120	282	186	1.9	784	Muti-purpose, EP grease for general applications.
SINOPEC MOS ₂ Lithium Grease № 2	-20 - 120	276	196	2.6	618	Lithium Grease with MOS ₂ for open gears and chains or other EP friction points
SINOPEC General Lithium Base Grease № 2	-20 - 120	280	200	2.5	--	For rolling bearing, sliding bearing and other friction points of general equipments



Please contact following sale agents if you need more information.

Testing services

It is important to examine the using oil regularly so that we can keep the vessel working well. In order to protect the safety of our customers' vessels, analyze the lubricant situation of vessel equipments in time, give full play to the SINOPEC marine lubricants' performance, and minimize the operating costs of the vessel owners, marine lubricants testing services system is established. Test reports were send to customers by emails, customers also can find test reports on the website of marine. sinopec. com.

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Lubricant company SINOPEC Corp.(SINOPEC Lubricant Co. for short) is the subsidiary company of China Petroleum & Chemical Corporation, is the largest top grade lubricant manufacturer and distributor in China with a production capacity of 1.46 million tons of packaged lubricants per year. It integrates the function of lubricant manufacturing, research, storage, transportation, sales and service. SINOPEC Lubricant Co. can provide the full range of quality marine lubricants and services for domestic and foreign ship owners. The marine lubricants include marine cylinder oil, marine system oil, marine truck piston engine oil and a variety of industry oil for marine equipment. Marine engine oil have got the approval by MAN, WARTSILA, MACK, MTU.

SINOPEC lubricant Co. has four blending plants for marine lubricants in China, has one own blending plant for marine lubricants in Singapore, and has several entrusted blending plants in Africa, Europe, and America. SINOPEC lubricant Co. has a supply network, completely cover the Chinese mainland and the big ports in the world.

Product List-Lubricants

Products	SAE Viscosity Grade	Density 15℃, kg/l	Viscosity, mm ² /s		Viscosity Index	Flash Point, ℃ (COC)	Pour Point, ℃	Base Number, mgKOH/g	Product Characteristics/Applications
			40℃	100℃					
Crosshead Diesel Oils									
SINOPEC Marine Cylinder Oil 5070S	50	0.935	225	19.7	99	252	-12	70.8	For using residual oil with sulphur content over 1.5%, especially for high load application.
SINOPEC Marine Cylinder Oil 5070	50	0.935	250	20.3	93	246	-9	71	For using residual oil with sulphur content over 1.5%.
SINOPEC Marine Cylinder Oil 5040	50	0.935	249	19.2	93	254	-9	41.3	For using low sulphur heavy fuel oil application.
SINOPEC Marine System Oil 3008	30	0.889	103	11.1	93	246	-15	7.8	Slow-speed crosshead diesel engine system oil.
SINOPEC Marine System Oil 3005	30	0.889	104	11.5	96	242	-15	5.3	Slow-speed crosshead diesel engine system oil, especially for electronic injection engine.
Trunk Piston Engine Oils									
SINOPEC TPEO 4040	40	0.914	146	14.4	96	246	-12	40	For medium-speed diesel engines using residual fuel oil or distillate fuel oil.
SINOPEC TPEO 3030	30	0.906	96	10.8	96	252	-12	30.3	
SINOPEC TPEO 4030	40	0.908	148	14.5	93	252	-12	32.1	
SINOPEC TPEO 3012	30	0.895	102	11.2	96	253	-12	12.4	
SINOPEC TPEO 4012	40	0.898	152	14.7	95	244	-12	12.6	

Products	SAE Viscosity Grade	Density 15℃, kg/l	Viscosity, mm ² /s		Viscosity Index	Flash Point, ℃ (COC)	Pour Point, ℃	Base Number, mgKOH/g	Product Characteristics/Applications
			40℃	100℃					
High Speed Diesel Oils									
SINOPEC CH-4 15W-40 Diesel Oil	15W-40	0.880	115	15.3	139	228	-33	11.5	For heavy duty and high pressure generator, life boat, high-speed diesel engine and so on
SINOPEC CF-4 15W-40 Diesel Oil	15W-40	0.875	108	14.7	142	228	-30	11	High-speed diesel engine oil, API CF-4

Products	ISO Viscosity Grade	Density 15℃, kg/l	Viscosity, mm ² /s		Viscosity Index	Flash Point, ℃ (COC)	Pour Point, ℃	Product Characteristics/Applications
			40℃	100℃				
SINOPEC L-HV 15 Low Temperature AW Hydraulic Oil	15	0.850	15.4	3.76	136	180	-45	High performance anti-wear hydraulic oils for modern, high pressure, marine hydraulic systems.
SINOPEC L-HV 22 Low Temperature AW Hydraulic Oil	22	0.863	21.5	4.97	166	186	-51	
SINOPEC L-HV 32 Low Temperature AW Hydraulic Oil	32	0.864	31.8	6.54	166	212	-42	
SINOPEC L-HV 46 Low Temperature AW Hydraulic Oil	46	0.870	46.2	8.41	160	226	-39	
SINOPEC L-HV 68 Low Temperature AW Hydraulic Oil	68	0.871	67.0	10.9	154	230	-36	
SINOPEC L-HV 100 Low Temperature AW Hydraulic Oil	100	0.866	101	15.2	160	254	-36	

Gear Oils									
SINOPEC L-CKD 100 High Duty Industry Gear Oil	100	0.886	10.8	98.7	92	246	-12	Extreme pressure gear oils for enclosed gears such as winches, pumps and elevators.	
SINOPEC L-CKD 150 High Duty Industry Gear Oil	150	0.891	14.3	150	92	249	-12		
SINOPEC L-CKD 220 High Duty Industry Gear Oil	220	0.895	18.3	217	93	242	-9		
SINOPEC L-CKD 320 High Duty Industry Gear Oil	320	0.898	23.2	313	92	250	-9		
SINOPEC L-CKT 220 Synthetic High Duty Industry Gear Oil	220	0.856	219	25.5	147	248	-48	Synthetic extreme pressure gear oils for enclosed gear, heavy load applications at wide temperature ranges.	
SINOPEC L-CKT 320 Synthetic High Duty Industry Gear Oil	320	0.857	319	33.6	149	252	-42		

Products	ISO Viscosity Grade	Density 15℃, kg/l	Viscosity, mm ² /s		Viscosity Index	Flash Point, ℃ (COC)	Pour Point, ℃	Product Characteristics/Applications
			40℃	100℃				
Turbine Oils								
SINOPEC L-TSA 32 Turbine Oil	32	0.860	32.4	5.56	109	224	-15	Circulating oils with high thermal/oxidation stability.
SINOPEC L-TSA 46 Turbine Oil	46	0.903	45.9	6.80	107	234	-15	
SINOPEC L-TSA 68 Turbine Oil	68	0.871	66.8	8.61	100	240	-15	
Compressor Oils								
SINOPEC L-DAB 100 Compressor Oil	150	0.856	100	11.1	97	260	-15	For reciprocating air compressor.
SINOPEC 4502 (100) Synthetic Compressor Oil	100	0.850	95.2	11.9	116	260	-39	Synthetic compressor oils with long using life.
SINOPEC L-DRA/A 68 Refrigeration Oil	68	0.859	68	--	--	240	-34	Refrigeration oil, low wax, low pour point.
SINOPEC 4524 (68) Synthetic Refrigeration Oil	68	0.980	66.1	8.10	90	275	-36	Synthetic refrigeration oil, reduced deposits due to high-temperature stability.
Heat Transfer Oils								
SINOPEC L-QB300 Heat Transfer Oil	32	0.872	32	5.35	99	216	-15	Heat transfer fluid for temperatures up to 300℃

