## **Shell Marine**



# LUBRICANTS FOR MARINE APPLICATIONS

Product catalogue



## YOU CAN RELY ON SHELL MARINE

Shell Marine aims to give you peace of mind by delivering the right products and technical services when and where you need them, and through its technology and marine industry knowledge.

### THE RIGHT PRODUCTS

We can help to remove the stress of managing multiple suppliers by offering one-stop access to a comprehensive range of high-quality products. For the tenth consecutive year, Shell has been named the number-one global lubricants market share leader according to Kline and Company.\*

Our products are designed to meet your current and anticipated needs. This helps you to relax in the knowledge that your lubricated equipment is well protected and operating efficiently. We can also make it easier to select the right products for your equipment, operating conditions and business needs.



### **DEDICATED SERVICE AND SECURED DELIVERY**

Through more than 30 lubricant blending plants and secured delivery in all major ports worldwide, you can be confident in our ability to keep your business moving by being able to deliver the products you need, when and where you need them. We are continuously expanding our port coverage as part of our commitment to give you peace of mind. You can order these lubricants at any time by telephone, email or fax through our international customer service centre. Visit www.psg.shell.com for a complete list of the ports in the Shell Marine network and its product portfolio.

# TECHNICAL SERVICES THAT IMPROVE YOUR EQUIPMENT RELIABILITY

Peace of mind also comes from knowing that you can improve the reliability of your equipment and have the training and expertise to solve lubrication challenges that might arise. Our technical services are designed to recommend the right products for your needs, offer flexible training programmes, help to optimise equipment performance and analyse and diagnose lubricant-related problems.

# EXPERIENCED PARTNER WITH MARINE KNOWLEDGE

With Shell Marine, you have an experienced partner that continues to invest in the future. Our current products and services are backed by over 100 years of pioneering marine technology. As part of the Shell Group, we have been the largest investor in research and development among the international oil and gas companies on a cumulative basis since 2007. Shell Projects and Technology employs more than 14,000 technical experts devoted to developing innovative products, including a dedicated team of experienced scientists and technical experts at our Marine Power and Innovation Centre in Hamburg, Germany.

### **HEALTH, SAFETY, SECURITY AND ENVIRONMENT**

Shell Marine has a clear commitment to health, safety, security and the environment, and works continuously to embed a safety culture throughout its organisation. We apply rigorous operating procedures and quality standards, and the latest technologies to enable safe and reliable deliveries to our customers. The standards we set for ourselves are also those we insist on from the contractors and partners working on our behalf.

# AS PART OF ITS INTERNATIONAL OFFERING, SHELL MARINE OFFERS THE FOLLOWING RANGE OF BRANDED TECHNICAL SERVICES

#### SHELL SERVICES

### **Shell LubeMonitor**

A condition monitoring programme for two-stroke engines that includes access to Shell tools and advice to help you strike an acceptable balance between cylinder oil costs and wear-related cylinder maintenance expenses

### Shell LubeAnalyst<sup>2</sup>

A flexible used-oil laboratory analysis service designed to save you time and money on maintenance resulting from equipment failure. This early-warning system aims to give you peace of mind that your equipment and lubricants are in optimum working order.

### Shell LubeAdvisor

This on-site support from a global team of field-based engineers includes lubrication surveys, vessel assessments and in-depth technical and applications support when required. Back-up support is provided by telephone fax or email

### PRODUCTS AND TYPICAL PHYSICAL CHARACTERISTICS

Our products are designed to meet your current and anticipated needs, and to help you relax with the knowledge that your lubricated equipment is well protected and operating efficiently. Please contact your Shell representative if you have any questions. Visit www.shell.com/marine to view our latest product portfolio.

PRODUCT NAME	PRODUCT DESCRIPTION	SAE GRADE		VISCOSITY, mm <sup>2</sup> /s AT	BASE NUMBER,	FLASH POUR POINT, °C		
		4	40°C	100°C	mg/KOH/g			AT 15°C
	LOW-SPEED ENGINES							
Shell <b>Alexia 53</b>	Cylinder oil for low-speed, two-stroke diesel engines entering Emission Control Areas. Suitable for use with engines burning low-sulphur and distillate fuels with up to 0.5% sulphur. Viscosity index >95	50	_	19.5	25	235	-15	908
Shell <b>Alexia 54</b>	High-performance cylinder oil with a viscosity index >95 for low-speed, crosshead diesel engines	40	_	15.8	60	>210	<-6	926
Shell <b>Alexia 56</b>	Cylinder oil for low-speed, two-stroke diesel engines running under conditions of extreme oil stress. Suitable for use with engines burning residual fuel with sulphur levels above 1.0%. Viscosity index >95	50	-	16.9	100	>210	<-6	954
Shell <b>Alexia</b> 50	High-quality cylinder oil for low-speed, two-stroke diesel engines burning heavy fuel oil. Viscosity index >95	50	_	19.5	70	>205	<-6	932
Shell <b>Alexia 140</b>	High-quality cylinder oil for newer, more-demanding low-speed, two-stroke diesel engines, especially those operating under challenging slow and flexible steaming conditions and with high-sulphur fuels. Viscosity index >95	60	-	25	140	225	-6	975
Shell <b>Melina 5</b> 30	Advanced multifunctional crankcase system lubricant for low-speed marine diesel engines	30	104	11.6	5	227	-18	888
	MEDIUM-SPEED ENGINES							
Shell <b>Argina 52</b> 40	Multifunctional crankcase lubricant for highly rated medium-speed diesel engines operating on residual, blended or distillate fuels with sulphur content <2.0%. Recommended for dual-fuel conditions	40	131	13.7	20	230	-21	900
Shell <b>Argina 53</b> 30	Multifunctional crankcase lubricant for highly rated medium-speed diesel engines operating on residual fuel with sulphur content <3.0%	30	105	11.9	30	210	-21	900
Shell <b>Argina 53</b> 40	Multifunctional crankcase lubricant for highly rated medium-speed diesel engines operating on residual fuel with sulphur content <3.0%	40	130	13.7	30	230	-21	905
Shell <b>Argina <i>54</i></b> 40	Multifunctional crankcase lubricant for highly rated medium-speed diesel engines operating under high-stress conditions and on residual fuel with sulphur content >2.0%	40	127	13.7	40	230	-21	910
Shell <b>Argina 55</b> 40	Multifunctional crankcase lubricant for highly rated medium-speed diesel engines operating under high stress conditions and on residual fuel with sulphur content >3.0%. Designed for the latest high-output, low-oil-consumption engines	40	123	13.7	55	230	-21	920
Shell <b>Gadinia</b> 53 30	High-quality multifunctional diesel engine lubricant designed for the most severe service main propulsion and auxiliary marine trunk piston engines burning distillate, hybrid and biofuels with a sulphur content up to 1%	30	104	11.9	12	210	-21	890
Shell <b>Gadinia</b> 53 40	High-quality multifunctional diesel engine lubricant designed for the most severe service main propulsion and auxiliary marine trunk piston engines burning distillate, hybrid and biofuels with a sulphur content up to 1%	40	128	13.7	12	230	-21	890
Shell <b>Gadinia AL</b> 30	Advanced lubricant for medium-speed, marine diesel engines operating on distillate fuels and where liner lacquering is a potential problem. Suitable for use in certain gears and some ancillary equipment	30	95	11.4	15	>200	-18	893
Shell <b>Gadinia AL</b> 40	Advanced lubricant for medium-speed, marine diesel engines operating on distillate fuels and where liner lacquering is a potential problem. Suitable for use in certain gears and some ancillary equipment	40	140	14.3	15	>200	-18	900
Shell <b>Mysella 53 N</b> 40	High-performance engine oil for four-stroke spark-ignition gas engines requiring a low-ash oil to meet the latest emission requirements	40	135	13.5	5	230	-18	890
Shell <b>Mysella 55 N</b> 40	Highest performance natural-gas engine oil for use in highly rated spark-ignition four-stroke engines requiring low ash oil. Specially developed to provide extended oil drain intervals	40	125	13.3	4.5	264	-18	890

PRODUCT NAME	PRODUCT DESCRIPTION	SAE GRADE		mm²/s AT NI	BASE NUMBER,	FLASH POINT, °C	POUR POINT, °C	DENSITY, kg/m³ AT
			40°C	100°C	mg/KOH/g			15°C
	HIGH-SPEED ENGINES	;		<b>'</b>		<u> </u>		'
Shell <b>Rimula R3+</b> 30	Monograde, heavy-duty diesel engine oil	30	93	11.0	9	242	-18	890
Shell <b>Rimula R4 L</b> 15W-40	Low-emissions, multigrade, heavy-duty diesel engine oil	-	115	15.5	10	227	-33	883
Shell <b>Rimula R4 X</b> 15W-40	Multigrade, heavy-duty diesel engine oil	-	109	14.7	10.5	230	-36	881
Shell Rimula R6 M 10W-40	Maintenance saving – fully synthetic, heavy-duty diesel engine oil	-	83	13.2	13	256	-36	848
Shell <b>Rotella DD+</b> 40	Heavy-duty, diesel two-stroke engine oil	40	138	14.4	8	250	-15	899
Shell <b>Sirius X</b> 40	Premium SHPD (super high performance diesel) lubricant	40	139	14.0	17	230	-18	890
	ENVIRONMENTALLY ACCEPTABLE	LUBRICAN	TS			1		
Shell <b>Naturelle</b> <i>HF-E 46</i>	Synthetic ester based, advanced hydraulic fluid for use in applications requiring vessel general permit (VGP) compliance. Approved for use in major OEMs' stabilisers and controllable-pitch propellers. Holds ISO 15380 (HEES) and DIN 51524 part 2 and 3. EU Ecolabel registered for VGP 2013 compliance		47	9.4	_	322	-42	921
Shell <b>Naturelle</b> <i>HF-E 68</i>	Synthetic ester based, advanced hydraulic fluid for use in applications requiring VGP compliance. Approved for use in major OEMs' stabilisers, controllable-pitch propellers and stern tubes. Holds ISO 15380 (HEES) and DIN 51524 part 2 and 3. EU Ecolabel registered for VGP 2013 compliance		68	12.3	-	320	-42	924
Shell <b>Naturelle S4</b> Gear Fluid 68	Fully saturated ester based gear fluid for use in thrusters and propulsion drives and certain stern tube designs. Superior load-carrying performance while maintaining biodegradability. EU Ecolabel registered for VGP 2013 compliance		68	11.0	_	>180	-24	909
Shell <b>Naturelle S4</b> Gear Fluid 100	Fully saturated ester based gear fluid for use in thrusters and propulsion drives and certain stern tube and controllable-pitch propeller designs. Superior load-carrying performance while maintaining biodegradability. EU Ecolabel registered for VGP 2013 compliance		100	14.0	_	280	-24	919
Shell <b>Naturelle S4</b> Gear Fluid 150	Fully saturated ester based gear fluid for use in thrusters and propulsion drives and certain stern tube designs. Superior load-carrying performance while maintaining biodegradability. EU Ecolabel registered for VGP 2013 compliance		150	18.0	_	280	-24	927
Shell <b>Naturelle S4</b> Stern Tube Fluid 100	Non-emulsifying fluid made from fully saturated esters. Approved by the major stern tube and manufacturers. EU Ecolabel certified guaranteeing VGP compliance. Designed to offer supe lubrication and resistance to hydrolysis		100	13.7	_	>230	-30	941
PRODUCT NAME	PRODUCT DESCRIPTION		VISCOSITY, mm²/s AT		BASE	NLGI	AVERAGE DROPPING	OPERATING TEMP, °C
			40°C	100°C			POINT, °C	
	ENVIRONMENTALLY ACCEPTABLE	LUBRICAN	TS					
Shell <b>Naturelle Grease 55</b> V120P 2	Advanced, biodegradable, extreme-pressure grease for use in plain and roller bearings and general vessel lubrication. Approved by major rudder carrier and deck machinery OEMs. E registered for VGP 2013 compliance	for U Ecolabel	120	19	Lithium	2	180	-35 to +100
Shell <b>Naturelle 52</b> Wire Rope Lubricant A			>550	>80	Calcium	1–2	120	-20 to +100

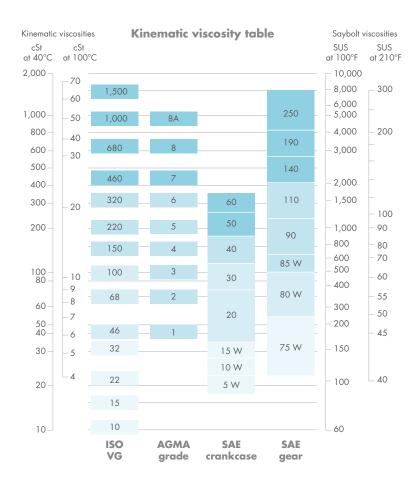
PRODUCT NAME	PRODUCT DESCRIPTION	VISCOS mm²/s		BASE NUMBER,	FLASH POINT, °C	POUR POINT, °C	DENSITY, kg/m³ AT	
			100°C	mg/KOH/g			15°C	
	HYDRAULIC SYSTEMS							
AeroShell Fluid 41	Superclean special application mineral fluid	14.1	5.3	_	105	<-60	870	
Shell <b>Tellus 52 VX</b> 15	High-performance hydraulic fluid providing outstanding protection and performance across a wide range of temperatures	15	3.7	_	200	-42	820	
Shell <b>Tellus 52 VX</b> 22	High-performance hydraulic fluid providing outstanding protection and performance across a wide range of temperatures	22	4.8	_	210	-42	835	
Shell <b>Tellus 52 VX</b> 32	High-performance hydraulic fluid providing outstanding protection and performance across a wide range of temperatures	32	6.1	_	215	-39	854	
Shell <b>Tellus 52 VX</b> 46	High-performance hydraulic fluid providing outstanding protection and performance across a wide range of temperatures	46	7.9	_	220	-36	856	
Shell <b>Tellus 52 VX</b> 68	High-performance hydraulic fluid providing outstanding protection and performance across a wide range of temperatures	68	10.5	_	230	-30	860	
Shell <b>Tellus 52 VX</b> 100	High-performance hydraulic fluid providing outstanding protection and performance across a wide range of temperatures	100	14	_	230	-30	870	
Shell <b>Tellus 53 M</b> 46	Premium, zinc-free, industrial hydraulic fluid	46	6.8	_	220	-33	865	
Shell <b>Tellus <i>54 VX</i></b> 32	Ultra-low-temperature hydraulic fluid	33.8 (2,624 at -40°C)	9.9	_	>100	-60	890	
	GEAR SYSTEMS							
Shell <b>Omala 52 GX</b> 68	Extreme-pressure lubricant for highly loaded enclosed gears and bearings. Siemens AG approval	68	8.7	_	>230	-27	885	
Shell <b>Omala <i>52 GX</i></b> 100	Extreme-pressure lubricant for highly loaded enclosed gears and bearings. Siemens AG approval	100	11.3	_	>230	-24	891	
Shell <b>Omala <i>52 GX</i></b> 150	Extreme-pressure lubricant for highly loaded enclosed gears and bearings. Siemens AG approval	150	14.8	_	>240	-24	897	
Shell <b>Omala 52 GX</b> 220	Extreme-pressure lubricant for highly loaded enclosed gears and bearings. Siemens AG approval	220	19.0	_	>240	-18	899	
Shell <b>Omala 52 GX</b> 320	Extreme-pressure lubricant for highly loaded enclosed gears and bearings. Siemens AG approval	320	24.2	_	>250	-15	903	
Shell <b>Omala 52 GX</b> 460	Extreme-pressure lubricant for highly loaded enclosed gears and bearings. Siemens AG approval	460	30.6	_	>250	-12	904	
Shell <b>Omala 52 GX</b> 680	Extreme-pressure lubricant for highly loaded enclosed gears and bearings. Siemens AG approval	680	42.1	_	>250	-9	912	
Shell <b>Omala 54 GXV</b> 150	Advanced synthetic extreme-pressure lubricant for heavy-duty enclosed gears and bearings	158	22.0	_	240	-45	862	
Shell <b>Omala 54 GXV</b> 220	Advanced synthetic extreme-pressure lubricant for heavy-duty enclosed gears and bearings	220	30.0	-	240	-42	864	
Shell <b>Omala 54 GXV</b> 320	Advanced synthetic extreme-pressure lubricant for heavy-duty enclosed gears and bearings	320	37.0	-	240	-42	866	
Shell <b>Omala <i>54 WE</i></b> 220	Advanced synthetic heavy-duty gear lubricant for special applications	222	34.4	_	278	-39	1,074	
			-					

PRODUCT NAME	PRODUCT DESCRIPTION	VISCOS mm²/s		BASE NUMBER,	FLASH POINT, °C	POUR POINT, °C	DENSITY, kg/m³ AT
		40°C	100°C	mg/KOH/g			15°C
	AIR COMPRESSORS						
Shell Corena S2 P 100	High-performance lubricant for reciprocating air compressors	100	9.2	_	240	-33	899
Shell <b>Corena 52 P</b> 150	High-performance lubricant for reciprocating air compressors	155	12.1	_	240	-30	902
Shell Corena S4 P 100	Advanced synthetic lubricant for reciprocating air compressors	100	10.2	_	260	-39	988
Shell Corena S4 R 46	Advanced synthetic lubricant for rotary-screw and vane air compressors	46	7.7	_	230	-45	843
Shell Corena S4 R 68	Advanced synthetic lubricant for rotary-screw and vane air compressors	68	10.2	_	248	-45	848
	REFRIGERATION COMPRESSORS						
Shell <b>Refrigeration Oil S4 FR-F</b> 32	Synthetic refrigerator lubricant for use with R134a and other HFC refrigerants	31	6.0	_	>220	-54	1,018
Shell <b>Refrigeration Oil 54 FR-F</b> 68	Synthetic refrigerator lubricant for use with R134a and other HFC refrigerants	66	8.8	_	>230	-42	991
Shell <b>Refrigeration Oil S4 FR-F</b> 100	Synthetic refrigerator lubricant for use with R134a and other HFC refrigerants	94	10.7	_	>230	-42	984
Shell <b>Refrigeration Oil 54 FR-V</b> 32	Synthetic refrigerator lubricant for use with HCFC and ammonia refrigerants	29	4.1	_	180	-45	870
Shell <b>Refrigeration Oil 54 FR-V</b> 68	Synthetic refrigerator lubricant for use with HCFC and ammonia refrigerants	68	6.2	_	190	-39	871
	GAS COMPRESSORS	'	,	'	'	'	<u>'</u>
Shell <b>Gas Compressor Oil</b> <b>S4 PV</b> 190	Advanced synthetic gas compressor oil	190	36.0	_	262	-30	1,056
	BEARING AND CIRCULATION SYSTEMS	5	'	1			
Shell <b>Morlina 52 B</b> 150	Advanced bearing and circulating oil	150	15.0	_	262	-15	887
Shell Morlina 54 B 220	Synthetic high-performance anti-wear lubricant for bearings, enclosed gears and circulation systems	220	28	_	275	-45	854
Shell Morlina 54 B 320	Synthetic high-performance anti-wear lubricant for bearings, enclosed gears and circulation systems	320	37	_	275	-45	854
Shell Morlina 54 B 460	Synthetic high-performance anti-wear lubricant for bearings, enclosed gears and circulation systems	460	51	_	275	-33	855

PRODUCT NAME	PRODUCT DESCRIPTION	VISCOS mm²/s		BASE NUMBER,	FLASH POINT, °C	POUR POINT, °C	DENSITY, kg/m³ AT	
		40°C	100°C	mg/KOH/g			15°C	
	TURBINES	<u>'</u>			<b>'</b>	_		
Shell <b>Turbo 7</b> 32	High-performance steam turbine oil	32	5.45	_	>215	<-33	840	
Shell <b>Turbo 7</b> 46	High-performance steam turbine oil	46	6.9	_	>220	<-27	858	
Shell <b>Turbo 7</b> 68	High-performance steam turbine oil	68	8.95	_	>240	<-24	871	
Shell <b>Turbo 7</b> 100	High-performance steam turbine oil	100	11.7	_	>250	<-24	873	
	TRANSMISSIONS	'		'	'		'	
Shell <b>Spirax 53 AX</b> 80W-90	High-performance GL-5 axle oil for general applications	169	16.8	_	220	-30	900	
Shell Spirax S4 ATF HDX	Advanced, synthetic technology, heavy-duty automatic transmission fluid	33	7.2	_	152	-48	847	
Shell <b>Spirax</b> <i>54 TXM</i>	Premium SAE 10W-30 universal transmission and hydraulic oil	60	9.4	_	220	-42	882	
	OTHER OILS AND FLUIDS							
Shell Nautilus Premium Outboard	High-performance engine oil for gasoline outboard motors	38	7.0	_	70	-35	871	
Shell <b>Heat Transfer Oil 52</b>	High-performance heat transfer fluid	29	5.1	_	220	-12	857	
PRODUCT NAME	PRODUCT DESCRIPTION				mm²/s AT	NLGI	DROPPING	
				40°C	100°C		POINT, °C	
	GREASES							
Shell <b>Gadus 52 A320</b> 2	Highly water resistant, extreme-pressure grease for wire rope, open gears and other open deck grease requirements		320	16.5	2	85		
Shell <b>Gadus 52 OG</b> 40	High-performance open gear and wire rope grease			655	40.0	_	_	
Shell <b>Gadus 52 OG</b> 50	High-performance open gear and wire rope grease			870	50.0	_	_	
Shell <b>Gadus 52 V100</b> 3	General-purpose, anti-wear grease recommended for the lubrication of electric motor b	earings		100	11.0	3	180	
Shell <b>Gadus 52 V220</b> 0	High-performance, multipurpose, extreme-pressure grease			220	19.0	0	_	
Shell <b>Gadus 52 V220</b> 1	High-performance, multipurpose, extreme-pressure grease			220	19.0	1	180	
Shell <b>Gadus 52 V220</b> 2	High-performance, multipurpose, extreme-pressure grease			220	19.0	2	180	
Shell Gadus 52 V220AC 2	High-performance, water-resistant, extreme-pressure grease			220	18.0	2	180	
Shell Gadus S2 V220AD 2	High-performance, heavy-duty grease containing solid lubricants			220	18.0	2	175	
Shell <b>Gadus 53</b> High Speed Coupling Grease	Premium gear-coupling grease			700	34.0	1	>150	
Shell <b>Gadus 53 T220</b> 2	Ultimate-performance, extreme-pressure diurea grease			220	19.0	2	260	
Shell <b>Gadus 53 V220C</b> 2	Top-performance, high-temperature, extreme-pressure multipurpose grease			220	19.0	2	240	
Shell <b>Gadus 55 V100</b> 2	Advanced multipurpose grease			100	14.0	2	260	

VISCOSITY RANGE OF ISO VISCOSITY GRADES							
ISO viscosity grade	Viscosity range, mm²/s (cSt) at 40°C	ISO viscosity grade	Viscosity range, mm²/s (cSt) at 40°C				
ISO VG 2	1.98-2.42	ISO VG 68	61.2–74.8				
ISO VG 3	2.88-3.52	ISO VG 100	90-110				
ISO VG 5	4.14-5.06	ISO VG 150	135–165				
ISO VG 7	6.12-7.48	ISO VG 220	198–242				
ISO VG 10	9.0-11.0	ISO VG 320	288–352				
ISO VG 15	13.5–16.5	ISO VG 460	414–506				
ISO VG 22	19.8–24.2	ISO VG 680	612–748				
ISO VG 32	28.8-35.2	ISO VG 1000	900-1,100				
ISO VG 46	41.4-50.6	ISO VG 1500	1,350–1,650				

GREASE NLGI CLASSIFICATION						
NLGI consistency	Cone penetration (worked)					
6	85–115					
5	130–160					
4	175–205					
3	220–250					
2	265–295					
1	310–340					
0	355–385					
00	400–430					
000	445–475					



### **FIND OUT MORE**

Further details on Shell marine lubricants and their applications can be obtained from your Shell Marine representative or visit www.shell.com/marine.

