

Shell Marine



# LUBRICANTS FOR MARINE APPLICATIONS

Product catalogue

October 2019



# MAKING YOUR VOYAGE MORE EFFICIENT, PREDICTABLE AND CLEANER

As your trusted partner, Shell Marine aims to deliver its smarter solutions and products through integrated solutions to help drive efficiency and lower operational costs.

## 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 or by email from our international customer service centre.

Our contact information can be found at [www.shell.com/marine](http://www.shell.com/marine). To view all ports in the Shell Marine network and the full product portfolio, visit [www.psg.shell.com](http://www.psg.shell.com).

## 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 more than 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

- |                              |  |
|------------------------------|--|
| <b>Shell<br/>LubeAnalyst</b> | An early warning system for equipment                                |
| <b>Shell<br/>LubeMonitor</b> | Monitor lubricant performance and consumption and engine performance |
| <b>Shell<br/>LubeAdvisor</b> | Optimise products onboard  |
| <b>Shell<br/>LubeCoach</b>   | Improve crew knowledge through training                              |
| <b>Shell<br/>LubeExpert</b>  | Expert practical advice on vessels                                   |

\*Kline and Company, 2016

\*Formerly Shell Rapid Lubricants Analysis

## 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](http://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, mg/KOH/g	FLASH POINT, °C	POUR POINT, °C	DENSITY, kg/m <sup>3</sup> AT 15°C
			40°C	100°C				
<b>LOW-SPEED ENGINES</b>								
Shell <b>Alexia 25</b>	Cylinder oil for low-speed, two-stroke diesel engines entering Emission Control Areas. Optimised for use with engines burning ultra-low-sulphur or distillate fuel with up to 0.1% sulphur and liquefied natural gas	50	-	19.5	25	>210	<-6	908
Shell <b>Alexia 40</b>	Cylinder oil for low-speed, two-stroke diesel engines specifically using very-low-sulphur fuel (0.5%) and ultra-low-sulphur fuel (0.1%) as specified by the engine manufactures	50	-	18.5	40	>210	<-6	915
Shell <b>Alexia 70</b>	Cylinder oil for low-speed, two-stroke diesel engines burning high-sulphur fuel oil	50	-	18.5	70	>210	<-6	932
Shell <b>Alexia 100</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%, 0.5% sulphur fuel (if needed for cleanliness), or a vessel with a scrubber. Optimised deposit control	50	-	18.5	100	>210	<-6	949
Shell <b>Alexia 140</b>	Cylinder oil for 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 S 30</b>	Advanced multifunctional crankcase system lubricant for low-speed marine diesel engines	30	104	11.6	5	227	-18	888
<b>MEDIUM-SPEED ENGINES</b>								
Shell <b>Argina S2 30</b>	Multifunctional crankcase lubricant for highly rated medium-speed diesel engines operating on residual, blended or distillate fuels with sulphur content up to 2.0%. Recommended for dual-fuel conditions	30	106	11.9	20	210	-21	898
Shell <b>Argina S2 40</b>	Multifunctional crankcase lubricant for highly rated medium-speed diesel engines operating on residual, blended or distillate fuels with sulphur content up to 2.0%. Recommended for dual-fuel conditions	40	131	13.7	20	230	-21	900
Shell <b>Argina S3 30</b>	Multifunctional crankcase lubricant for highly rated medium-speed diesel engines operating on residual fuel with sulphur content up to 3.0%	30	105	11.9	30	210	-21	900
Shell <b>Argina S3 40</b>	Multifunctional crankcase lubricant for highly rated medium-speed diesel engines operating on residual fuel with sulphur content up to 3.0%	40	130	13.7	30	230	-21	905
Shell <b>Argina S4 40</b>	Multifunctional crankcase lubricant for highly rated medium-speed diesel engines operating under high-stress conditions and on residual fuel with sulphur content above 2.0%	40	127	13.7	40	230	-21	910
Shell <b>Argina S5 40</b>	Multifunctional crankcase lubricant for highly rated medium-speed diesel engines operating under high stress conditions and on residual fuel with sulphur content above 3.0%. Designed for the latest high-output, low-oil-consumption engines	40	123	13.7	55	230	-21	920
Shell <b>Gadunia S3 30</b>	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>Gadunia S3 40</b>	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>Gadunia AL 30</b>	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>Gadunia AL 40</b>	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 S3 N 40</b>	High-performance engine oil for four-stroke spark-ignition gas engines requiring a low-wash oil to meet the latest emission requirements	40	135	13.5	5	230	-18	890
Shell <b>Mysella S5 N 40</b>	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

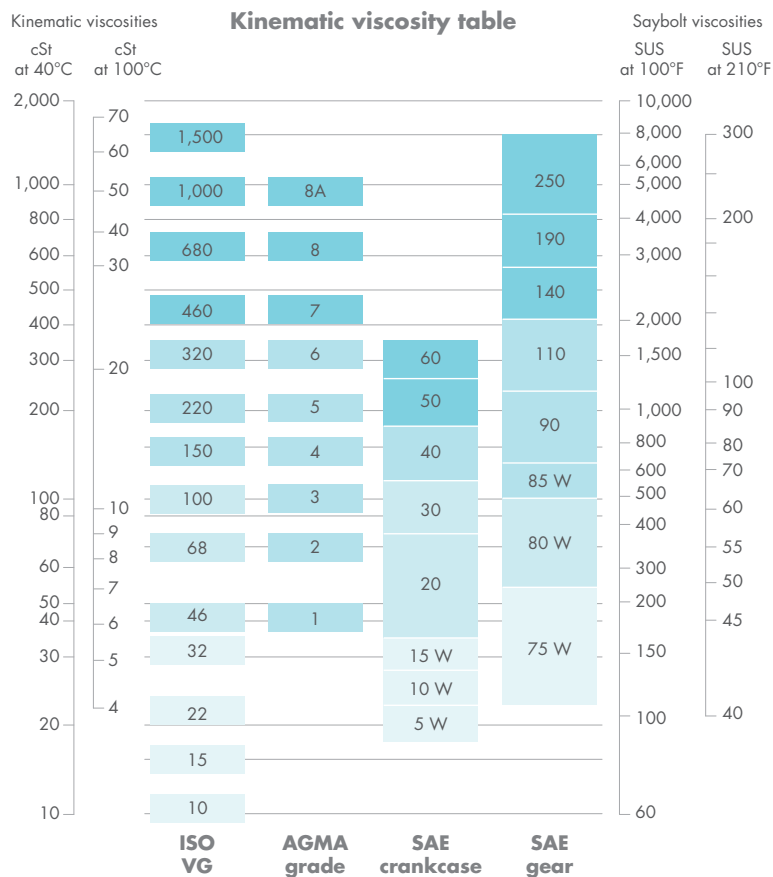
PRODUCT NAME	PRODUCT DESCRIPTION	SAE GRADE	VISCOSITY, mm <sup>2</sup> /s AT		BASE NUMBER, mg/KOH/g	FLASH POINT, °C	POUR POINT, °C	DENSITY, kg/m <sup>3</sup> AT 15°C
			40°C	100°C				
<b>HIGH-SPEED ENGINES</b>								
Shell <b>Rimula R3+ 30</b>	Monograde, heavy-duty diesel engine oil	30	93	11.0	9	242	-18	890
Shell <b>Rimula R4 L 15W-40</b>	Low-emissions, multigrade, heavy-duty diesel engine oil	-	115	15.5	10	227	-33	883
Shell <b>Rimula R4 X 15W-40</b>	Multigrade, heavy-duty diesel engine oil	-	109	14.7	10.5	230	-36	881
Shell <b>Rimula R6 M 10W-40</b>	Maintenance saving – fully synthetic, heavy-duty diesel engine oil	-	83	13.2	13	256	-36	848
Shell <b>Rotella DD+ 40</b>	Heavy-duty, diesel two-stroke engine oil	40	138	14.4	8	250	-15	899
Shell <b>Sirius X 40</b>	Premium SHPD (super high performance diesel) lubricant	40	139	14.0	17	230	-18	890
<b>ENVIRONMENTALLY ACCEPTABLE LUBRICANTS</b>								
Shell <b>Naturelle HF-E 46</b>	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 HF-E 68</b>	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 Gear Fluid 68</b>	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. Complies with the VGP 2013 requirements.		68	11.0	-	>180	-24	909
Shell <b>Naturelle S4 Gear Fluid 100</b>	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. Complies with the VGP 2013 requirements.		100	14.0	-	280	-24	919
Shell <b>Naturelle S4 Gear Fluid 150</b>	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 Stern Tube Fluid 100</b>	Non-emulsifying fluid made from fully saturated esters. Approved by the major stern tube and seal manufacturers. Designed to offer superior lubrication and resistance to hydrolysis. EU Ecolabel registered for VGP 2013 compliance.		100	13.7	-	>230	-30	941
PRODUCT NAME	PRODUCT DESCRIPTION	VISCOSITY, mm <sup>2</sup> /s AT		BASE	NLGI	AVERAGE DROPPING POINT, °C	OPERATING TEMP, °C	
		40°C	100°C					
<b>ENVIRONMENTALLY ACCEPTABLE LUBRICANTS</b>								
Shell <b>Naturelle Grease S5 V120P 2</b>	Advanced, biodegradable, extreme-pressure grease for use in plain and roller bearings and for general vessel lubrication. Approved by major rudder carrier and deck machinery OEMs. EU Ecolabel registered for VGP 2013 compliance.		120	19	Lithium	2	180	-35 to +100
Shell <b>Naturelle S2 Wire Rope Lubricant A</b>	A high-performance, fully biodegradable lubricant for use on wire ropes, cables and open gears offering high resistance to water wash-off while maintaining outstanding adhesion properties. Complies with the VGP 2013 definitions.		>550	>80	Calcium	1-2	120	-20 to +100

PRODUCT NAME	PRODUCT DESCRIPTION	VISCOSITY, mm <sup>2</sup> /s AT		BASE NUMBER, mg/KOH/g	FLASH POINT, °C	POUR POINT, °C	DENSITY, kg/m <sup>3</sup> AT 15°C
		40°C	100°C				
		HYDRAULIC SYSTEMS					
<b>AeroShell Fluid 41</b>	Superclean special application mineral fluid	14.1	5.3	-	105	<-60	870
<b>Shell Tellus S2 VX 15</b>	High-performance hydraulic fluid providing outstanding protection and performance across a wide range of temperatures	15	3.7	-	200	-42	820
<b>Shell Tellus S2 VX 22</b>	High-performance hydraulic fluid providing outstanding protection and performance across a wide range of temperatures	22	4.8	-	210	-42	835
<b>Shell Tellus S2 VX 32</b>	High-performance hydraulic fluid providing outstanding protection and performance across a wide range of temperatures	32	6.1	-	215	-39	854
<b>Shell Tellus S2 VX 46</b>	High-performance hydraulic fluid providing outstanding protection and performance across a wide range of temperatures	46	7.9	-	220	-36	856
<b>Shell Tellus S2 VX 68</b>	High-performance hydraulic fluid providing outstanding protection and performance across a wide range of temperatures	68	10.5	-	230	-30	860
<b>Shell Tellus S2 VX 100</b>	High-performance hydraulic fluid providing outstanding protection and performance across a wide range of temperatures	100	14	-	230	-30	870
<b>Shell Tellus S3 M 46</b>	Premium, zinc-free, industrial hydraulic fluid	46	6.8	-	220	-33	865
<b>Shell Tellus S4 VX 32</b>	Ultra-low-temperature hydraulic fluid	33.8 (2,624 at -40°C)	9.9	-	>100	-60	890
GEAR SYSTEMS							
<b>Shell Omala S2 GX 68</b>	Extreme-pressure lubricant for highly loaded enclosed gears and bearings. Siemens AG approval	68	8.7	-	>230	-27	885
<b>Shell Omala S2 GX 100</b>	Extreme-pressure lubricant for highly loaded enclosed gears and bearings. Siemens AG approval	100	11.3	-	>230	-24	891
<b>Shell Omala S2 GX 150</b>	Extreme-pressure lubricant for highly loaded enclosed gears and bearings. Siemens AG approval	150	14.8	-	>240	-24	897
<b>Shell Omala S2 GX 220</b>	Extreme-pressure lubricant for highly loaded enclosed gears and bearings. Siemens AG approval	220	19.0	-	>240	-18	899
<b>Shell Omala S2 GX 320</b>	Extreme-pressure lubricant for highly loaded enclosed gears and bearings. Siemens AG approval	320	24.2	-	>250	-15	903
<b>Shell Omala S2 GX 460</b>	Extreme-pressure lubricant for highly loaded enclosed gears and bearings. Siemens AG approval	460	30.6	-	>250	-12	904
<b>Shell Omala S2 GX 680</b>	Extreme-pressure lubricant for highly loaded enclosed gears and bearings. Siemens AG approval	680	42.1	-	>250	-9	912
<b>Shell Omala S4 GXV 150</b>	Advanced synthetic extreme-pressure lubricant for heavy-duty enclosed gears and bearings	158	22.0	-	240	-45	862
<b>Shell Omala S4 GXV 220</b>	Advanced synthetic extreme-pressure lubricant for heavy-duty enclosed gears and bearings	220	30.0	-	240	-42	864
<b>Shell Omala S4 GXV 320</b>	Advanced synthetic extreme-pressure lubricant for heavy-duty enclosed gears and bearings	320	37.0	-	240	-42	866
<b>Shell Omala S4 WE 220</b>	Advanced synthetic heavy-duty gear lubricant for special applications	222	34.4	-	278	-39	1,074

PRODUCT NAME	PRODUCT DESCRIPTION	VISCOSITY, mm <sup>2</sup> /s AT		BASE NUMBER, mg/KOH/g	FLASH POINT, °C	POUR POINT, °C	DENSITY, kg/m <sup>3</sup> AT 15°C
		40°C	100°C				
		<b>AIR COMPRESSORS</b>					
Shell <b>Corena S2 P 100</b>	High-performance lubricant for reciprocating air compressors	100	9.2	-	240	-33	899
Shell <b>Corena S2 P 150</b>	High-performance lubricant for reciprocating air compressors	155	12.1	-	240	-30	902
Shell <b>Corena S4 P 100</b>	Advanced synthetic lubricant for reciprocating air compressors	100	10.2	-	260	-39	988
Shell <b>Corena S4 R 46</b>	Advanced synthetic lubricant for rotary-screw and vane air compressors	46	7.7	-	230	-45	843
Shell <b>Corena S4 R 68</b>	Advanced synthetic lubricant for rotary-screw and vane air compressors	68	10.2	-	248	-45	848
<b>REFRIGERATION COMPRESSORS</b>							
Shell <b>Refrigeration Oil S4 FR-F 32</b>	Synthetic refrigerator lubricant for use with R134a and other HFC refrigerants	31	6.0	-	>220	-54	1,018
Shell <b>Refrigeration Oil S4 FR-F 68</b>	Synthetic refrigerator lubricant for use with R134a and other HFC refrigerants	66	8.8	-	>230	-42	991
Shell <b>Refrigeration Oil S4 FR-F 100</b>	Synthetic refrigerator lubricant for use with R134a and other HFC refrigerants	94	10.7	-	>230	-42	984
Shell <b>Refrigeration Oil S4 FR-V 32</b>	Synthetic refrigerator lubricant for use with HCFC and ammonia refrigerants	29	4.1	-	180	-45	870
Shell <b>Refrigeration Oil S4 FR-V 68</b>	Synthetic refrigerator lubricant for use with HCFC and ammonia refrigerants	68	6.2	-	190	-39	871
<b>GAS COMPRESSORS</b>							
Shell <b>Gas Compressor Oil S4 PV 190</b>	Advanced synthetic gas compressor oil	190	36.0	-	262	-30	1,056
<b>BEARING AND CIRCULATION SYSTEMS</b>							
Shell <b>Morlina S2 B 150</b>	Advanced bearing and circulating oil	150	15.0	-	262	-15	887
Shell <b>Morlina S4 B 220</b>	Synthetic high-performance anti-wear lubricant for bearings, enclosed gears and circulation systems	220	28	-	275	-45	854
Shell <b>Morlina S4 B 320</b>	Synthetic high-performance anti-wear lubricant for bearings, enclosed gears and circulation systems	320	37	-	275	-45	854
Shell <b>Morlina S4 B 460</b>	Synthetic high-performance anti-wear lubricant for bearings, enclosed gears and circulation systems	460	51	-	275	-33	855

PRODUCT NAME	PRODUCT DESCRIPTION	VISCOSITY, mm <sup>2</sup> /s AT		BASE NUMBER, mg/KOH/g	FLASH POINT, °C	POUR POINT, °C	DENSITY, kg/m <sup>3</sup> AT 15°C
		40°C	100°C				
<b>TURBINES</b>							
Shell <b>Turbo T 32</b>	High-performance steam turbine oil	32	5.45	-	>215	<-33	840
Shell <b>Turbo T 46</b>	High-performance steam turbine oil	46	6.9	-	>220	<-27	858
Shell <b>Turbo T 68</b>	High-performance steam turbine oil	68	8.95	-	>240	<-24	871
Shell <b>Turbo T 100</b>	High-performance steam turbine oil	100	11.7	-	>250	<-24	873
<b>TRANSMISSIONS</b>							
Shell <b>Spirax S3 AX 80W-90</b>	High-performance GL-5 axle oil for general applications	169	16.8	-	220	-30	900
Shell <b>Spirax S4 ATF HDX</b>	Advanced, synthetic technology, heavy-duty automatic transmission fluid	33	7.2	-	152	-48	847
Shell <b>Spirax S4 TXM</b>	Premium SAE 10W-30 universal transmission and hydraulic oil	60	9.4	-	220	-42	882
<b>OTHER OILS AND FLUIDS</b>							
Shell <b>Nautilus Premium Outboard</b>	High-performance engine oil for gasoline outboard motors	38	7.0	-	70	-35	871
Shell <b>Heat Transfer Oil S2</b>	High-performance heat transfer fluid	29	5.1	-	220	-12	857
PRODUCT NAME	PRODUCT DESCRIPTION	VISCOSITY, mm <sup>2</sup> /s AT		VISCOSITY, mm <sup>2</sup> /s AT 100°C	NLGI	DROPPING POINT, °C	
		40°C	100°C				
<b>GREASES</b>							
Shell <b>Gadus S2 A320 2</b>	Highly water resistant, extreme-pressure grease for wire rope, open gears and other open deck grease requirements	320	16.5	320	2	85	
Shell <b>Gadus S2 OG 40</b>	High-performance open gear and wire rope grease	655	40.0	655	-	-	
Shell <b>Gadus S2 OG 50</b>	High-performance open gear and wire rope grease	870	50.0	870	-	-	
Shell <b>Gadus S2 V100 3</b>	General-purpose, anti-wear grease recommended for the lubrication of electric motor bearings	100	11.0	100	3	180	
Shell <b>Gadus S2 V220 0</b>	High-performance, multipurpose, extreme-pressure grease	220	19.0	220	0	-	
Shell <b>Gadus S2 V220 1</b>	High-performance, multipurpose, extreme-pressure grease	220	19.0	220	1	180	
Shell <b>Gadus S2 V220 2</b>	High-performance, multipurpose, extreme-pressure grease	220	19.0	220	2	180	
Shell <b>Gadus S2 V220AC 2</b>	High-performance, water-resistant, extreme-pressure grease	220	18.0	220	2	180	
Shell <b>Gadus S2 V220AD 2</b>	High-performance, heavy-duty grease containing solid lubricants	220	18.0	220	2	175	
Shell <b>Gadus S3 High Speed Coupling Grease</b>	Premium gear-coupling grease	700	34.0	700	1	>150	
Shell <b>Gadus S3 T220 2</b>	Ultimate-performance, extreme-pressure diurea grease	220	19.0	220	2	260	
Shell <b>Gadus S3 V220C 2</b>	Top-performance, high-temperature, extreme-pressure multipurpose grease	220	19.0	220	2	240	
Shell <b>Gadus S5 V100 2</b>	Advanced multipurpose grease	100	14.0	100	2	260	

VISCOSITY RANGE OF ISO VISCOSITY GRADES				GREASE NLGI CLASSIFICATION	
ISO viscosity grade	Viscosity range, mm <sup>2</sup> /s (cSt) at 40°C	ISO viscosity grade	Viscosity range, mm <sup>2</sup> /s (cSt) at 40°C	NLGI consistency	Cone penetration (worked)
ISO VG 2	1.98–2.42	ISO VG 68	61.2–74.8	6	85–115
ISO VG 3	2.88–3.52	ISO VG 100	90–110	5	130–160
ISO VG 5	4.14–5.06	ISO VG 150	135–165	4	175–205
ISO VG 7	6.12–7.48	ISO VG 220	198–242	3	220–250
ISO VG 10	9.0–11.0	ISO VG 320	288–352	2	265–295
ISO VG 15	13.5–16.5	ISO VG 460	414–506	1	310–340
ISO VG 22	19.8–24.2	ISO VG 680	612–748	0	355–385
ISO VG 32	28.8–35.2	ISO VG 1000	900–1,100	00	400–430
ISO VG 46	41.4–50.6	ISO VG 1500	1,350–1,650	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](http://www.shell.com/marine)

