



# MARINE INDUSTRIES OEM APPROVALS

RSC Bio Solutions' products meet or exceed the performance of their petroleum-based alternatives, both in customer and independent laboratory tests and in real-world applications. In fact, after years of extensive monitoring—analyzing data from 225 systems on 49 vessels totaling approximately 1,009 combined years of service—RSC EnviroLogic® lubricants and gear oils have demonstrated their proven high performance through lower operating temperatures, longer changeover intervals and extended equipment life.

So it's no surprise that these proven products have more than 100 approvals from major OEMs—successfully meeting or exceeding their extensive testing procedures.



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## UPDATED PRODUCT NAMES (MARINE)

RSC Bio Solutions has streamlined our product naming system to align more closely with the industry and provide easier product identification for our customers. Please utilize the chart below in order to determine the new name for each product listed in the OEM Approvals chart. This chart can be found on our website at: <http://rscbio.com/updatednamingkey>.

PREVIOUS NAME	CURRENT/NEW NAME
EnviroLogic 100 Series	RSC EnviroLogic HF Series
EnviroLogic 115 Hydraulic Fluid	RSC EnviroLogic HF 15
EnviroLogic 122 Hydraulic Fluid	RSC EnviroLogic HF 22
EnviroLogic 132 Hydraulic Fluid	RSC EnviroLogic HF 32
EnviroLogic 146 Hydraulic Fluid	RSC EnviroLogic HF 46
EnviroLogic 168 Hydraulic Fluid	RSC EnviroLogic HF 68
EnviroLogic 1100 Hydraulic Fluid	RSC EnviroLogic HF 100
EnviroLogic 200 Series	RSC EnviroLogic GO Series
EnviroLogic 200 Gear Oil	RSC EnviroLogic GO 68
EnviroLogic 210 Gear Oil	RSC EnviroLogic GO 100
EnviroLogic 215 Gear Oil	RSC EnviroLogic GO 150
EnviroLogic 222 Gear Oil	RSC EnviroLogic GO 220
EnviroLogic 232 Gear Oil	RSC EnviroLogic GO 320
EnviroLogic 3000 Series	RSC EnviroLogic HF HP Series
EnviroLogic 3015 Hydraulic Fluid	RSC EnviroLogic HF 15 HP
EnviroLogic 3022 Hydraulic Fluid	RSC EnviroLogic HF 22 HP
EnviroLogic 3032 Hydraulic Fluid	RSC EnviroLogic HF 32 HP
EnviroLogic 3046 Hydraulic Fluid	RSC EnviroLogic HF 46 HP
EnviroLogic 3068 Hydraulic Fluid	RSC EnviroLogic HF 68 HP
EnviroLogic 3100 Hydraulic Fluid	RSC EnviroLogic HF 100 HP
EnviroLogic 800 Series	RSC EnviroLogic Greases
EnviroLogic 800	RSC EnviroLogic Grease 0
EnviroLogic 801	RSC EnviroLogic Grease 1
EnviroLogic 802	RSC EnviroLogic Grease 2

OEM APPROVALS			
Application	Original Equipment Manufacturer (OEM)	Product / Series	Notes
Stern Tubes	Aegir	RSC EnviroLogic HF 68 HP	Prime Seals and Propulsion Systems
		RSC EnviroLogic HF 100 HP	Prime Seals and Propulsion Systems
		RSC EnviroLogic GO 150	Prime Seals and Propulsion Systems
	Blohm & Voss	RSC EnviroLogic HF 68 HP	Simplex Compact Viton Bio and Viton Pod Seals
		RSC EnviroLogic HF 100 HP	Simplex Compact Viton Pod and Viton Bio Seals
		RSC EnviroLogic GO 100	Simplex Compact Viton Bio Seals and Viton Pod Seals <60°C
		RSC EnviroLogic GO 150	Simplex Compact Viton Bio Seals and Viton Pod Seals <60°C
	Carco	RSC EnviroLogic HF 46 HP	Approved for use in HT700 and Z500 Elastomers
		RSC EnviroLogic HF 68 HP	Approved for use in S850, HT700, HT750 and Z500 Elastomers
		RSC Futerra HF 46	Approved for use in HT700 and Z500 Elastomers
	James Walker Seals	RSC EnviroLogic HF 46 HP	Bi-O-Lion Seals
		RSC Futerra HF 68	Bi-O-Lion Seals
		RSC Futerra HF 100	Bi-O-Lion Seals
		RSC EnviroLogic GO 68	Bi-O-Lion Seals
		RSC EnviroLogic GO 150	Bi-O-Lion Seals
			NM59-74/80 up to 70°C
			Ultraglide up to 70°C
			LR 5781 up to 70°C
	Kemel	RSC EnviroLogic HF 68 HP	Fluoro-Elastomer
		RSC EnviroLogic HF 100 HP	Fluoro-Elastomer
		RSC Futerra HF 68	Fluoro-Elastomer
		RSC Futerra HF 100	Fluoro-Elastomer
	Lagersmit	RSC EnviroLogic HF 46 HP	SUPREME Lip Seals - FKM
		RSC EnviroLogic HF 68 HP	SUPREME Lip Seals - FKM
		RSC EnviroLogic HF 100 HP	SUPREME Lip Seals - FKM
		RSC EnviroLogic GO 68	SUPREME Lip Seals - FKM
		RSC EnviroLogic GO 100	SUPREME Lip Seals - FKM
	SKF	RSC EnviroLogic HF 68 HP	Simplex Sterntube Seal Systems
		RSC EnviroLogic HF 100 HP	Simplex Sterntube Seal Systems
		RSC Futerra HF 68	Simplex Sterntube Seal Systems
		RSC Futerra HF 100	Simplex Sterntube Seal Systems
		RSC EnviroLogic GO 100	Simplex Sterntube Seal Systems
		RSC EnviroLogic GO 150	Simplex Sterntube Seal Systems
	Versitec	RSC EnviroLogic GO 68	Versiton FKM
		RSC EnviroLogic GO 100	Versiton FKM
		RSC EnviroLogic GO 220	Versiton FKM
		RSC EnviroLogic HF 46 HP	Versiton FKM
		RSC EnviroLogic HF 68 HP	Versiton FKM
		RSC EnviroLogic HF 100 HP	Versiton FKM
	Wartsila	RSC EnviroLogic GO 68	A-Series, AC, MC, Worksafe, MN & ML, Manebar (EJ, EK, EL, EM) and T Series Seals
		RSC EnviroLogic GO 150	BIO SEAL RING, Viton, NBR, A-Series, MC, Worksafe, MN & ML and T Series Seals
		RSC EnviroLogic HF 68 HP	BIO SEAL RING, NBR, A-Series, MC, Worksafe, MN & ML, Manebar (EJ, EK, EL, EM) and T Series Seals
		RSC EnviroLogic HF 100 HP	BIO SEAL RING, Viton, NBR, A-Series, MC, Worksafe, MN & ML, Manebar (EJ, EK, EL, EM) and T Series Seals
		RSC Futerra HF 68	BIO SEAL RING, A-Series, AC, MC, Worksafe, MN & ML, Manebar (EJ, EK, EL, EM), and T Series Seals
		RSC Futerra HF 100	BIO SEAL RING, A-Series, AC, MC, Worksafe, MN & ML, Manebar (EJ, EK, EL, EM), and T Series Seals
	ZF	RSC EnviroLogic HF 68 HP	Meets Specifications
		RSC EnviroLogic HF 100 HP	Meets Specifications
		RSC Futerra HF 68	Meets Specifications
		RSC Futerra HF 100	Meets Specifications
Thrusters	ABB	RSC EnviroLogic HF 68 HP	Azipod X Seals
		RSC EnviroLogic HF 100 HP	Azipod X Seals
	Berg/Caterpillar	RSC EnviroLogic GO 68	Meets Specification of MTA (azimuth thruster)
		RSC EnviroLogic GO 68	Meets Specification of MTT (tunnel thruster)
		RSC EnviroLogic GO Series	FKM Seals Only
	Carco	RSC EnviroLogic GO 150	Approved for use in S850, HT700, HT750 and Z500 Elastomers
	Chesterton	RSC EnviroLogic GO 150	95 A Red Polymer - Email Approval
		RSC EnviroLogic GO 68	AWC800 Seals
		RSC EnviroLogic GO 100	AWC800 Seals
		RSC EnviroLogic GO 150	AWC800 Seals
		RSC EnviroLogic HF 32 HP	AWC800 Seals
		RSC EnviroLogic HF 68 HP	AWC800 Seals
	Freudenberg/Merkel	RSC EnviroLogic GO 68	NBR Seals
		RSC EnviroLogic GO 100	HNBR/FKM Seals
		RSC EnviroLogic GO 100	NBR Seals

OEM APPROVALS					
Application	Original Equipment Manufacturer (OEM)		Product / Series	Notes	
Thrusters (cont'd)	Freudenberg/Merkel (cont'd)		RSC EnviroLogic GO 150	HNBR/FKM Seals	
			RSC EnviroLogic GO 150	NBR Seals	
			RSC EnviroLogic HF 32 HP	NBR Seals	
			RSC EnviroLogic HF 46 HP	NBR Seals	
			RSC EnviroLogic HF 68 HP	NBR/HNBR/FKM Seals	
			RSC EnviroLogic HF 100 HP	NBR/HNBR/FKM Seals	
			RSC Futerra HF 32	NBR Seals	
			RSC Futerra HF 46	NBR Seals	
			RSC Futerra HF 68	NBR Seals	
			RSC Futerra HF 100	NBR Seals	
	Garlock		RSC EnviroLogic HF HP Series	NBR, HNBR, FKM Seals	
			RSC EnviroLogic GO Series	HNBR, FKM Seals	
			RSC Futerra HF Series	NBR, HNBR, FKM Seals	
	Hamilton Jet		RSC EnviroLogic HF 46 HP	HM811 Jet	
	Hundested		RSC EnviroLogic GO 100	Thrusters	
			RSC EnviroLogic GO 150	Thrusters	
	James Walker Seals		RSC EnviroLogic GO 68	Bi-O-Lion Seals	
			RSC EnviroLogic GO 100	Bi-O-Lion Seals	
			RSC EnviroLogic GO 150	Bi-O-Lion Seals	
			RSC EnviroLogic GO 220	Bi-O-Lion Seals	
	Jastram		RSC EnviroLogic HF 46 HP	Approved for use in Transverse Thrusters	
			RSC EnviroLogic HF 68 HP		
			RSC FUTERRA HF 46		
	KaMeWa		RSC EnviroLogic GO 68	Meets Specification/Approval Pending	
	Kamome		RSC EnviroLogic GO 150	TFA Type Side Thruster	
			RSC EnviroLogic GO 100	TFA and TCB Type Side Thruster	
	Kawasaki		RSC EnviroLogic GO 100	Approved for use in Side Thruster	
	Kemel-Thruster First		RSC EnviroLogic GO 100	Fluoro-Elastomer	
			RSC EnviroLogic GO 150	Fluoro-Elastomer	
	Lagersmit		RSC EnviroLogic GO 68	SUPREME Lip Seals - FKM	
			RSC EnviroLogic GO 100	SUPREME Lip Seals - FKM	
			RSC EnviroLogic GO 150	SUPREME Lip Seals - FKM	
			RSC EnviroLogic GO 220	SUPREME Lip Seals - FKM	
	Nakashima		RSC EnviroLogic GO 100	TC Model, TCT Model and TFN/TFT Model	
			RSC EnviroLogic GO 150	TC Model and TFN/TFT Model	
	Rolls Royce		Tunnel Thruster (TT)	RSC EnviroLogic GO 100	Meets Specification/Approval Pending
			Azipull (AZP)	RSC EnviroLogic GO 100	Meets Specification/Approval Pending
			Swing-up (TCNS/TCNC)	RSC EnviroLogic GO 100	Meets Specification/Approval Pending
			Azimuth (US, CRP, Contaz, UL, UUC)	RSC EnviroLogic GO 100	Meets Specification/Approval Pending
			Azimuth (TC, Ulsteinvik)	RSC EnviroLogic GO 100	Meets Specification/Approval Pending
			Azimuth (UUC)	RSC EnviroLogic GO 150	Seal configuration dependent
	Steerprop		RSC EnviroLogic GO 150	FKM Seals Only	
	Thrustmaster		RSC EnviroLogic HF HP Series	Thrusters Requiring Biodegradable Fluid	
			RSC EnviroLogic GO 100	Thruster and Gearbox Oil	
	Wartsila		RSC EnviroLogic GO 68	A-Series, MC, Worksafe, MN & ML and T Series Seals	
			RSC EnviroLogic GO 150	A-Series, MC, Worksafe, MN & ML and T Series Seals and Gearboxes	
			RSC EnviroLogic HF 68 HP	A-Series, MC, Worksafe, MN & ML and T Series Seals	
			RSC EnviroLogic HF 100 HP	A-Series, MC, Worksafe, MN & ML and T Series Seals	
			RSC Futerra HF 68	A-Series, MC, Worksafe, MN & ML and T Series Seals	
			RSC Futerra HF 100	A-Series, MC, Worksafe, MN & ML and T Series Seals	
Clutches	Logan		RSC EnviroLogic GO 150	Approved for use with Logan Clutches	
	Ortlinghaus		RSC EnvioLogic GO Series	Wet Running Clutches	
Gearboxes	Reintjes		RSC EnviroLogic GO 150	Marine Gearboxes With and Without Clutches	
	Rolls Royce		RSC EnviroLogic GO 320	Enclosed Gears	
CPP	Berg/Caterpillar		RSC EnviroLogic HF 32 HP	Meets Specification of MPP (Controllable Pitch Propeller) with HDX	
			RSC EnviroLogic HF 46 HP	Meets Specification of MPP (Controllable Pitch Propeller) with BCX	
			RSC Futerra HF 32	Meets Specification of MPP (Controllable Pitch Propeller) with HDX	
			RSC Futerra HF 46	Meets Specification of MPP (Controllable Pitch Propeller) with BCX	
	Garlock		RSC EnviroLogic HF HP Series	NBR, HNBR, FKM Seals	
			RSC EnvioLogic GO Series	HNBR, FKM Seals	
			RSC Futerra HF Series	NBR, HNBR, FKM Seals	
	Kawasaki		RSC EnviroLogic HF 68 HP	CP Propeller	
MAN		RSC EnviroLogic HF 68 HP	FP, VB and VBS Propeller Systems		
		RSC EnviroLogic HF 100 HP	FP, VB and VBS Propeller Systems		

OEM APPROVALS			
Application	Original Equipment Manufacturer (OEM)	Product / Series	Notes
CPP (cont'd)	Rolls Royce	RSC EnviroLogic GO Series	Rauma Finland CPP - Seal configuration dependent
	ZF	RSC EnviroLogic HF 32 HP	Meets Specification
		RSC EnviroLogic HF 46 HP	Meets Specification
		RSC EnviroLogic HF 68 HP	Meets Specification
		RSC Futerra HF 32	Meets Specification
		RSC Futerra HF 46	Meets Specification
		RSC Futerra HF 68	Meets Specification
Stabilizers	Rolls Royce	RSC EnviroLogic HF 68 HP	VM Series, Neptune, Aquarius and International Type Stabilizers
	SKF (Blohm & Voss)	RSC Futerra HF 68	VM Series, Neptune, Aquarius and International Type Stabilizers
		RSC EnviroLogic HF 68 HP	SIMPLEX-COMPACT S-type, Z-type and F-type Stabilizers
		RSC Futerra HF 68	SIMPLEX-COMPACT S-type, Z-type and F-type Stabilizers
	Sperry Marine	RSC EnviroLogic HF 68 HP	Fin shaft bearings and rigging axis bearings
Construction Equipment	Komatsu	RSC EnviroLogic HF 46 HP	Up to 85°C Fluid Temperature
	LinkBelt	RSC EnviroLogic HF 68 HP	Meets Specification/Approval Pending
Hoses	Gates	RSC EnviroLogic HF HP Series	All Gates Hydraulic Hoses
ROV	Perry Slingsby Systems	RSC EnviroLogic HF 32	PRO-A65604-001 Standards for Basic Hydraulic Equipment Design
Lifts/Deck Equipment	Aker Solutions	RSC EnviroLogic HF HP Series	Meets Specification
		RSC Futerra HF Series	Meets Specification
	Cargotec/MacGregor	RSC EnviroLogic HF HP Series	Meets Specification
		RSC Futerra HF Series	Meets Specification
	Hatlapa	RSC EnviroLogic HF HP Series	Hydraulic Motors - Viton and NBR Seals
	Huisman	RSC EnviroLogic HF 46 HP	All Huisman Equipment
	Nakakita	RSC EnviroLogic HF 15 HP	Approved for use in Nakakita Valve Remote Control Equipment
		RSC EnviroLogic HF 22 HP	
		RSC EnviroLogic HF 32 HP	
		RSC Futerra HF 32	
	Rolls Royce	RSC EnviroLogic HF HP Series	LP Systems
		RSC EnviroLogic HF 15 HP	Remote Controls
		RSC EnviroLogic HF 100 HP	Hydraulic Main System
	National Oilwell Varco	RSC EnviroLogic HF HP Series	AmClyde, BLM, DRECO, Hydralift, Molde, National, Unit Crane & Winch Products
		RSC EnviroLogic GO Series	Dreco D Drawworks
	TTS	RSC EnviroLogic HF 32 HP	TTS RoRo and Cylinder Operated Equipment
Rudders	Aegir	RSC EnviroLogic Grease 2	Approved for use with Prime Seals and Rudderstocks
	Becker Marine Systems	RSC EnviroLogic HF 32 HP	On list of Lubricants Approved for use in Becker Rudders
		RSC EnviroLogic Grease 2	
	Carco	RSC EnviroLogic Grease 2	Approved for use in HT700, HT750, Z400, Z450 and Z500 elastomers
Pumps	Eaton/Vickers V104C Vane Pump	RSC EnviroLogic HF 46 HP	Approved for Eaton Brochure 03-401-2010 Rev 1
	Eaton/Vickers V104C Vane Pump	RSC Futerra HF 32	Approved for Eaton E-FDGN-TB002-E and Eaton Brochure 03-401-2010 Rev 1
	Eaton/Vickers 35VQ25 Vane Pump	RSC EnviroLogic HF 46 HP	Approved for Eaton Brochure 03-401-2010 Rev 1
	Eaton/Vickers 35VQ25 Vane Pump	RSC Futerra HF 32	Approved for Eaton E-FDGN-TB002-E and Eaton Brochure 03-401-2010 Rev 1
	Linde	RSC EnviroLogic HF 68 HP	Up to 90°C Fluid Temperature
	Parker/Denison T6H20C Hybrid Pump	RSC EnviroLogic HF HP Series	Approved, HF-6, HF-1
	Parker/Denison T6H20C Hybrid Pump	RSC Futerra HF 46	Approved, HF-6, HF-1
	Parker/Denison Piston Pumps	RSC EnviroLogic HF 46 HP	Meets Specification
	Rexroth	RSC EnviroLogic HF 68 HP	Approved for use in Axial Piston Units
		RSC EnviroLogic HF 32 HP	
		RSC EnviroLogic HF 46 HP	
	Sauer Danfoss	RSC EnviroLogic HF 32 HP	On Approved Biodegradable (HEPR) Fluids List
		RSC EnviroLogic HF 46 HP	On Approved Biodegradable (HEPR) Fluids List
		RSC EnviroLogic HF 68 HP	On Approved Biodegradable (HEPR) Fluids List
		RSC Futerra HF 32	On Approved Biodegradable (HEPR) Fluids List
		RSC Futerra HF 46	On Approved Biodegradable (HEPR) Fluids List
		RSC Futerra HF 68	On Approved Biodegradable (HEPR) Fluids List

For more information about RSC Bio Solutions, visit us at [rscbio.com](http://rscbio.com) or call +1704.684.6100.



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