

## LUBRICANT LIST FOR STERN TUBE SEALS

BASE OIL	OIL MAKER	OIL BRAND	SEAL RING MATERIAL	
			FKM	
			NORMAL	FOR ESTER OIL
MINERAL OIL	<b>AEGEAN OIL</b>	ALFAMAR 340, 440	OK	OK
	<b>AGIP</b>	CLADIUM 50 SAE 30	OK	OK
		CLADIUM 120 SAE 30, 40	OK	OK
		CLADIUM 300 SAE 30, 40	OK	OK
		CLADIUM 400 SAE 30, 40	OK	OK
		OTE 68, 80	OK	OK
		ACER 100	OK	OK
		<b>BP</b>	ENERGOL IC-HF 304, 504	OK
	ENELGOL DL-MP 30		OK	OK
	ENERGOL OE-HT 30		OK	OK
	ENERGOL THB 68, 100		OK	OK
	ENERGOL IC-HFX 203, 204		OK	OK
	ENERGOL IC-HFX 303, 304		OK	OK
	ENERGOL IC-HFX 403, 404		OK	OK
	ENERGOL IC-HFX 504, 554		OK	OK
	<b>CASTROL</b>	MARINE CDX 30	OK	OK
		MARINE MPX 30	OK	OK
		MARINE MLC 30	OK	OK
		215 MXD, 220 MXD	OK	OK
		PERFECTO T-68, T-100	OK	OK
		CORAL 2 [Only for emergency]	OK	OK
		TLX 203 PLUS, 204 PLUS	OK	OK
		TLX 303 PLUS, 304 PLUS	OK	OK
		TLX 403 PLUS, 404 PLUS	OK	OK
		TLX 504 PLUS, 554 PLUS	OK	OK
		MLC 40	OK	OK



: Approved oil.

### REMARKS

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MINERAL OIL	<b>CASTROL</b>	MHP 153, 154	OK	OK
	<b>CHEVRON (TEXACO / CALTEX)</b>	REGAL OIL R&O 68, 100	OK	OK
		TARO XD 30	OK	OK
		TARO DP 30, 40	OK	OK
		TARO 20 DP 30, 40	OK	OK
		TARO 30 DP 30, 40	OK	OK
		DELO 1000 MARINE OIL 20, 30, 40	OK	OK
		URSA SUPER LA 30, 40	OK	OK
		VERITAS 800 MARINE 30	OK	OK
		TARO 40 XL 40	OK	OK
		TARO 20 DP 30X, 40X	OK	OK
		TARO 30 DP 30X, 40X	OK	OK
		TARO 40 XL 40X	OK	OK
		TARO 50 XL 40X	OK	OK
		TARO 60 XL 40X	OK	OK
		GST 100, 150	OK	OK
		CLARITY HYDRAULIC AW 100 (Environmentally Friendly Oil)	OK	OK
	<b>CHINESE PETROLEUM</b>	MARILUBE AC 30	OK	OK
	<b>COSMO</b>	MARINE 3000, 3005, 3010	OK	OK
		MARINE 3025, 3030, 3040	OK	OK
		MARINE 4025, 4030, 4040	OK	OK
		TURBINE SUPER 68, 100	OK	OK
	<b>EXXON (ESSO)</b>	EXXMAR XA	OK	OK
		EXXMAR 12TP 30, 40	OK	OK
		EXXMAR X70	OK	OK
		EXXMAR 40TP 40	OK	OK



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			FKM	
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MINERAL OIL	EXXON (ESSO)	NUTO 68	OK	OK
		NUTO H 68	OK	OK
		TERESSO (TERESSTIC) 68, 77, 100	OK	OK
	FINA	ALCANO 308	OK	OK
	FUJI (FUKKOL)	SEA-ACE 307	OK	OK
		MARINE 312	OK	OK
		MARINE 3201	OK	OK
		HYDROL X-100, X-150	OK	OK
		AD TURBINE 68	OK	OK
	GULF	MARINE ENGINE OIL 77	OK	OK
		HARMONY 53, 61	OK	OK
		HARMONY 59 EP	OK	OK
		HARMONY 54 AW	OK	OK
		VERITAS V 9, 13	OK	OK
		VERITAS SD 30	OK	OK
		VERITAS HD V 13	OK	OK
		VERITAS DPO 30, 40	OK	OK
		VERITAS SELECT 30, 40, 353	OK	OK
	GULF MARINE	GULFSEA SUPERBEAR 3006, 3008	OK	OK
		GULFSEA POWER 3030, 3040, 3055	OK	OK
		GULFSEA POWER MDO 3012, 3015, 3020	OK	OK
		GULFSEA TURBINE OIL 100	OK	OK
	IDEMITSU (DAPHNE)	TURBINE OIL 68, 83, 100	OK	OK
		OIL 100	OK	OK
		MARINE OIL SM 30	OK	OK
		MARINE OIL SS 30	OK	OK



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			FKM	
			NORMAL	FOR ESTER OIL
MINERAL OIL	IDEMITSU (DAPHNE)	MARINE OIL SX 30	OK	OK
		MARINE OIL SW 30	OK	OK
		MARINE OIL SY 30	OK	OK
	JX NIPPON OIL & ENERGY (ENEOS)	MARINE T 103, 104	OK	OK
		MARINE T 203, 204	OK	OK
		MARINE T 303, 304	OK	OK
		FBK OIL RO 100	OK	OK
		FBK TURBINE 68, 100	OK	OK
		MARINE S 30	OK	OK
		DISOLA M 3010, 4010	OK	OK
		DISOLA M 3015, 4015	OK	OK
		DISOLA M 3020, 4020	OK	OK
		AURELIA XL 3030	OK	OK
		AURELIA XL 3040	OK	OK
		RIX TURBINE 68, 100	OK	OK
		ATLANTA MARINE D 3005	OK	OK
	KYGNUS	DX-330	OK	OK
	LUKOIL	NAVIGO 6 SO (SAE30)	OK	OK
	LUBRICATION ENGINEERS	8430 MONOLEC GFS ENGINE OIL	OK	OK
	MOBIL	DTE OIL HEAVY	OK	OK
		DTE OIL HEAVY MEDIUM	OK	OK
		DTE OIL EXTRA HEAVY	OK	OK
		MOBILGARD 300, 312, 412, 450	OK	OK
		MOBILGARD M330, M430, M440	OK	OK
		VOCO ENGINE SPECIAL	OK	OK
		DTE 16M, 18M, 19M	OK	OK



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MINERAL OIL	MOBIL	STERNTUBE LUBRICANT [Only for emergency]	OK	OK
		DTE 10 EXCEL 68, 100, 150	OK	OK
	SHELL	MELINA S Oil 30	OK	OK
		MELINA OIL 30, 40	OK	OK
		GADINIA OIL 30, 40	OK	OK
		ARGINA T OIL 30, 40	OK	OK
		ARGINA X OIL 30, 40	OK	OK
		ARGINA XL OIL 40	OK	OK
		TELLUS OIL 100	OK	OK
		TURBINE OIL EP 100	OK	OK
		TURBO OIL T 100	OK	OK
		ARGINA S Oil 30, 40	OK	OK
	SK ENERGY	TURBINE OIL 68	OK	OK
		SUPERMAR TURBINE	OK	OK
		SUPERMAR AS	OK	OK
	SINOPEC	MARINE SYSTEM OIL 3005	OK	OK
		TPEO 4030	OK	OK
		TPEO 4040	OK	OK
	TOTAL / ELF	AURELIA XL 3030	OK	OK
		AURELIA XL 3040	OK	OK
		AURELIA TI 3040, 4040	OK	OK
		PRESLIA 68, 100	OK	OK
		PERFORMANCE 2B 20W, 30, 40	OK	OK
		PERFORMANCE 3C 30	OK	OK
		PERFORMANCE HP 30	OK	OK
	ELPOLNA DS 68, 100	OK	OK	




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MINERAL OIL	TOTAL / ELF	DISAL HD1 30	OK	OK
		DISAL HD2 30W	OK	OK
		ATLANTA MARINE D 3005	OK	OK
	VICKERS	HYDROX 21 (VG220) [Only for emergency]	OK	OK
		HYDROX 550 (VG68), 850 (VG100)	OK	OK
	YUKONG	SUPERMAR AS	OK	OK
	PERTAMINA	MEDRIPAL 307	OK	OK

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