

EXX EAGLE INDUSTRY CO., LTD.

April 7, 2021

## LUBRICANT LIST FOR STERNTUBE SEALS <FOR SEAL TYPE AX, CX, DX>

	OIL MAKER	OIL BRAND	SEAL RING MATERIAL
BASE OIL			FKM
	AEGEAN OIL	ALFAMAR 340, 440	Ø
		ALFASYS 305	<u> </u>
	AGIP	CLADIUM 50 SAE 30	ØØ
		CLADIUM 120 SAE 30, 40	<u>Ø</u>
		CLADIUM 300 SAE 30, 40	<u> </u>
		CLADIUM 400 SAE 30, 40	<u> </u>
		OTE 68, 80	<u> </u>
		ACER 100	<u>Ø</u>
		ENERGOL IC-HF 304, 504	ØØ
		ENELGOL DL-MP 30	<u> </u>
		ENERGOL OE-HT 30	<u> </u>
	BP	ENERGOL THB 68, 100	<u>Ø</u>
MINERAL OIL		ENERGOL IC-HFX 203, 204	<u>Ø</u>
ERAL		ENERGOL IC-HFX 303, 304	<u>Ø</u>
MINE		ENERGOL IC-HFX 403, 404	<u>Ø</u>
		ENERGOL IC-HFX 504, 554	<u>Ø</u>
	CASTROL	MARINE CDX 30	<u>Ø</u> B
		MARINE MPX 30	<u>Ø</u>
		MARINE MLC 30	<u>Ø</u>
		215 MXD, 220 MXD	<u>Ø</u>
		PERFECTO T-68, T-100	<u>Ø</u>
		CORAL 2 [Only for emergency]	<u>0</u> 8
		TLX 203 PLUS, 204 PLUS	Ø
		TLX 303 PLUS, 304 PLUS	<u> </u>
		TLX 403 PLUS, 404 PLUS	Ø
		TLX 504 PLUS, 554 PLUS	<u>O</u> B
		MLC 40	<u> </u>



: Approved oil.

- 1. Oils in this list were tested for compatibility with the seal material and approved for the application as stern tube lubricant.
- 2. Follow ship builder's recommendation for oil viscosity if it is specified for S/T bearing lubrication.
- 3. Oil list will be revised without notice.



EKK EAGLE INDUSTRY CO., LTD.

April 7, 2021

# LUBRICANT LIST FOR STERNTUBE SEALS <FOR SEAL TYPE AX, CX, DX>

Ę			SEAL RING MATERIAL
BASE OIL	OIL MAKER	OIL BRAND	FKM
	CASTROL	MHP 153, 154	<u>OB</u>
		REGAL OIL R&O 68, 100	ØØ
		TARO DP 30, 40	<u>Ø</u> B
		TARO 20 DP 30, 40	<u>O</u> B
		TARO 30 DP 30, 40	<u>O</u> B
		TARO 20 DP 30X, 40X	<u>Ø</u> Ø
		TARO 30 DP 30X, 40X	<u>O</u> B
		DELO 1000 MARINE OIL 20, 30, 40	00
		URSA SUPER LA 30, 40	<u>Ø</u> Ø
	CHEVRON	VERITAS 800 MARINE 30	ØØ
	(TEXACO / CALTEX)	TARO XD 30	<b>0</b> 8
OIL		TARO 12 XP 30, XP30(2)	<b>Ø</b> Ø
MINERAL OIL		TARO 12 XP 40, XP40(2)	<b>Ø</b>
MINE		TARO 40 XL 40	<b>Ø</b>
		TARO 40 XL 40X	<b>Ø</b> 8
		TARO 50 XL 40X	08
		TARO 60 XL 40X	<u>Ø</u> Ø
		GST 100, 150	<u>Ø</u> Ø
		CLARITY HYDRAULIC AW 100 (Environmentally Friendly Oil)	<del>ob</del>
	CPC	MARILUBE OIL AC-30 SP	<u>Ø</u> B
		MARINE 3000, 3005, 3010	<u>Ø</u> B
		MARINE 3025, 3030, 3040	<u>0</u> 8
	COSMO	MARINE 4025, 4030, 4040	<b>O</b> 8
		TURBINE SUPER 68, 100	<b>O</b> 8
		EXXMAR 40TP 40	<u>Ø</u>



: Approved oil.

- 1. Oils in this list were tested for compatibility with the seal material and approved for the application as stern tube lubricant.
- 2. Follow ship builder's recommendation for oil viscosity if it is specified for S/T bearing lubrication.
- 3. Oil list will be revised without notice.



**EXC EAGLE INDUSTRY CO., LTD.** April 7, 2021

## LUBRICANT LIST FOR STERNTUBE SEALS <FOR SEAL TYPE AX, CX, DX>

	OIL MAKER	OIL BRAND	SEAL RING MATERIAL
BASE OIL			FKM
	EXXON (ESSO)	EXXMAR XA	Øß
		EXXMAR 12TP 30, 40	<u>®</u>
		EXXMAR X70	Ø
		NUTO 68	Ø
		NUTO H 68	Ø
		TERESSO (TERESSTIC) 68, 77, 100	OB
	FINA	ALCANO 308	ØØ
		SEA-ACE 307	Ø
		MARINE 312	Ø
	FUJI (FUKKOL)	MARINE 3201	Ø
		HYDROL X-100, X-150	Ø
ЪГ		AD TURBINE 68	<u>O</u> B
MINERAL OIL		MARINE ENGINE OIL 77	Ø
NER	GULF	Gulfsea Power MDO 4012, 4015, 4020	Ø
Σ		HARMONY 53, 61	Ø
		HARMONY 59 EP	Ø
		HARMONY 54 AW	Ø
		VERITAS V 9, 13	Ø
		VERITAS SD 30	Ø
		VERITAS HD V 13	Ø
		VERITAS DPO 30, 40	<b>O</b> Ø
		VERITAS SELECT 30, 40, 353	OB
	GULF OIL MARINE	GULFSEA SUPERBEAR 3006, 3008	Ø
		GULFSEA POWER 3030, 3040, 3055	Ø
		GULFSEA POWER 4030, 4040, 4055	Ø
		GULFSEA POWER MDO 3012, 3015, 3020	Ø



: Approved oil.

- Oils in this list were tested for compatibility with the seal material and approved for the application as stern tube 1. lubricant.
- Follow ship builder's recommendation for oil viscosity if it is specified for S/T bearing lubrication. 2.
- Oil list will be revised without notice. 3.





April 7, 2021

# LUBRICANT LIST FOR STERNTUBE SEALS <FOR SEAL TYPE AX, CX, DX>

_			SEAL RING MATERIAL
BASE OIL	OIL MAKER	OIL BRAND	FKM
	GULF OIL MARINE	GulfSea Hydraulic HVI Plus 100, 150	Ø
		GULFSEA TURBINE OIL 100	Øß
		TURBINE OIL 68, 83, 100	<b>Ø</b>
		OIL 100	<b>O</b>
		MARINE OIL SM 30	<b>O</b>
	IDEMITSU	MARINE OIL SS 30	<b>OB</b>
	(DAPHNE)	MARINE OIL SW 40	<b>OIO</b>
		MARINE OIL SX 30	<b>ON</b>
		MARINE OIL SW 30	<b>6</b>
		MARINE OIL SY 30	<b>(W)</b>
		MARINE T 103, 104	<b>(W</b> )
		MARINE T 203, 204	<b>6</b> 8
OIL	ENEOS Corporation	MARINE T 303, 304	<b>0</b> 8
MINERAL OIL		FBK OIL RO 100	<u>0</u> 8
IINE		FBK TURBINE 68, 100	<b>0</b> 8
2		MARINE S 30	<b>0</b> 8
		DISOLA M 3010, 4010	<u>0</u> 8
		DISOLA M 3015, 4015	<b>0</b> 8
		DISOLA M 3020, 4020	<b>0</b> 8
		AURELIA XL 3030	<u>0</u> 8
		AURELIA XL 3040	<b>0</b> k
		RIX TURBINE 68, 100	<b>0</b> 8
		ATLANTA MARINE D 3005	<b>6</b> k
	KYGNUS	DX-330	Ø
	LUKOIL	NAVIGO 6 SO (SAE30)	ØB
		NAVIGO 6 CO (SAE30)	<u>Ø</u>
	LUBRICATION ENGINEERS	8430 MONOLEC GFS ENGINE OIL	08



: Approved oil.

- 1. Oils in this list were tested for compatibility with the seal material and approved for the application as stern tube lubricant.
- 2. Follow ship builder's recommendation for oil viscosity if it is specified for S/T bearing lubrication.
- 3. Oil list will be revised without notice.



**EKK EAGLE INDUSTRY CO., LTD.** 

April 7, 2021

## LUBRICANT LIST FOR STERNTUBE SEALS <FOR SEAL TYPE AX, CX, DX>

_	OIL MAKER	OIL BRAND	SEAL RING MATERIAL
BASE OIL			FKM
		DTE OIL HEAVY	<u>O</u> B
		DTE OIL HEAVY MEDIUM	ØØ
		DTE OIL EXTRA HEAVY	<b>O</b> B
		DTE 16M, 18M, 19M	<u>O</u> B
	MOBIL	MOBILGARD 300, 300C, 300HD, 312, 412, 450	<u>O</u> B
		MOBILGARD M330,M420, M430, M440	<u>o</u> v
		VOCO ENGINE SPECIAL	<u>o</u> k
		STERNTUBE LUBRICANT [Only for emergency]	<u>0</u> 8
		DTE 10 EXCEL 68, 100, 150	<u> </u>
	Detro Chine	DCC3008	<u> </u>
	PetroChina	DCC4008	<u>Ø</u> B
ЫL		ARGINA S Oil 30, 40	<u>O</u> B
MINERAL OIL		ARGINA S5 40	00
INER	SHELL	ARGINA T OIL 30, 40	<b>0</b> 9
M		ARGINA X OIL 30, 40	<b>0</b> 19
		ARGINA XL OIL 40	<u>Ø</u>
		GADINIA OIL 30, 40	<u> </u>
		MELINA S Oil 30	<u></u>
		MELINA OIL 30, 40	<u>OR</u>
		Rimula Oil 30	<u> </u>
		Rimula Oil 40	<u></u>
		TELLUS OIL 100	<u></u>
		TELLUS S2 VX 68	 
		TURBINE OIL EP 100	<u></u>
		TURBO OIL T 68, 100	<u> </u>
	SK ENERGY	TURBINE OIL 68	<u> </u>



: Approved oil.

- 1. Oils in this list were tested for compatibility with the seal material and approved for the application as stern tube lubricant.
- 2. Follow ship builder's recommendation for oil viscosity if it is specified for S/T bearing lubrication.
- 3. Oil list will be revised without notice.



**EXC EAGLE INDUSTRY CO., LTD.** April 7, 2021

## LUBRICANT LIST FOR STERNTUBE SEALS <FOR SEAL TYPE AX, CX, DX>

_	OIL MAKER	OIL BRAND	SEAL RING MATERIAL
BASE OIL			FKM
	SK ENERGY	SUPERMAR TURBINE	68
		SUPERMAR AS	00
		MARINE SYSTEM OIL 3005	<b>0</b> 9
	SINOPEC	TPEO 4030	08
		TPEO 4040	08
		AURELIA XL 3030	<b>Ø</b>
		AURELIA XL 3040	<b>O</b> R
		AURELIA TI 3040, 4040	<b>6</b> k
	TOTAL / ELF	PRESLIA 68, 100	<b>6</b> k
		PERFORMANCE 2B 20W, 30, 40	Ø
		PERFORMANCE 3C 30	Ø
OIL		PERFORMANCE HP 30	Ø
MINERAL OIL		ELPOLNA DS 68, 100	Ø
AINE		DISAL HD1 30	Ø
~		DISAL HD2 30W	<u>0</u> 8
		ATLANTA MARINE D 3005	<b>O</b>
	VICKERS	HYDROX 21 (VG220) [Only for emergency]	<b>OB</b>
		HYDROX 550 (VG68), 850 (VG100)	Ø
	YUKONG	SUPERMAR AS	<b>6</b> k
	PERTAMINA	MEDRIPAL 307	08
	HYUNDAI OIL	XTEER TURBINE VG 68, 100	<u>Ø</u>
		XTEER HVI VG 68, 100	<u></u>
		XTEER SO 3005	®



: Approved oil.

- Oils in this list were tested for compatibility with the seal material and approved for the application as stern tube 1. lubricant.
- Follow ship builder's recommendation for oil viscosity if it is specified for S/T bearing lubrication. 2.
- Oil list will be revised without notice. 3.