

Comparison of Oil Lubricants for Boerger Pumps, Multichoppers, Multicrushers and Rotorrakes



		↓ Börger standard lubricants ↓			↓ Equivalent Lubricants from other manufacturers ↓							
Type of Pump	Pump Chamber	Mfr & Type of Lubricant	DIN Classification	Application	BP	Castrol	Chevron	Grainger	Klüber Lubrication	Lubriplate	Mobil	Shell
Standard Pumps (1) (2)	Gear:	BP Energol GR XP 220	CLP (mineral oil) DIN 51517	Standard lubricant for gear units	BP Energol GR XP 220	Castrol Alpha SP 220	Chevron Meropa 220	Grainger #4DNH4 (5 gal.) (Mobilgear 600 XP 220)	Klüberoil GEM 1-220 N	N/A	*Mobilgear 600 XP 220	Shell Omala S2 G 220
	Inter-mediate:	Aral Vitam GF 68	HLP (hydraulic oil) DIN 51524	Quench liquid, zinc-free HLP	BP Bartran HV 68 (zinc-free HLP)	Castrol Hyspin ZZ 68 (zinc-free HLP)	Chevron Clarity Hydraulic Oil AW 68 (zinc free HLP)	Grainger #2NMW4 (5 gal.) #2NMW3 (1 gal.) (Bio-Ultimax 1000) Also Grainger #21A471 (5 gal.) (Bio-Fleet Hydraulic Fluid)	N/A	Lubriplate ZF 68 (zinc-free HLP)	Mobil DTE 10 Excel 68 (zinc-free HLP)	Shell Tellus S3 M 68** (zinc-free HLP)
											* Formerly Mobilgear 630	** Formerly Shell Tellus S 68
Pumps w/EPDM Rubber	Gear:	BP Energol GR XP 220	CLP (mineral oil) DIN 51517	Standard lubricant for gear units	BP Energol GR XP 220	Castrol Alpha SP 220	Chevron Meropa 220	Grainger #4DNH4 (5 gal.) (Mobilgear 600 XP 220)	Klüberoil GEM 1-220 N	N/A	Mobilgear 600 XP 220 (Mobilgear 630)	Shell Omala S2 G 220
	Inter-mediate:	BP Enersyn HTX 68	CLP HC (synthetic oil) DIN 51517	Quench - EPDM & ATEX Pumps	BP Enersyn HTX 68	Castrol Alphasyn T 68	Chevron Tegra Syn Comp 68	Grainger #44N755 (1 gal.) (Super Lube Synthetic Lweight)	Klübersynth GEM 4-68 N	Lubriplate Syn Lube 68	Mobil SHC 626	Shell Omala S4 GX 68
ATEX Pumps	Gear:	BP Enersyn HTX 220	CLP HC (synthetic oil) DIN 51517	Gear lube - ATEX & DPL Series Pumps	BP Enersyn HTX 220	Castrol Alphasyn T 220	Chevron Tegra Syn Gear 220	Grainger #6Y778 (1 quart) (Mobil SHC 630)	Klübersynth GEM 4-220 N	Lubriplate Syn Lube 220	Mobil SHC 630	Shell Omala S4 GX 220
	Inter-mediate:	BP Enersyn HTX 68	CLP HC (synthetic oil) DIN 51517	Quench - EPDM & ATEX Pumps	BP Enersyn HTX 68	Castrol Alphasyn T 68	Chevron Tegra Syn Comp 68	Grainger #44N755 (1 gal.) (Super Lube Synthetic Lweight)	Klübersynth GEM 4-68 N	Lubriplate Syn Lube 68	Mobil SHC 626	Shell Omala S4 GX 68
DPL / Protect Pumps	Gear:	BP Enersyn HTX 220	CLP HC (synthetic oil) DIN 51517	Gear lube - ATEX & DPL Series Pumps	BP Enersyn HTX 220	Castrol Alphasyn T 220	Chevron Tegra Syn Gear 220	Grainger #6Y778 (1 quart) (Mobil SHC 630)	Klübersynth GEM 4-220 N	Lubriplate Syn Lube 220	Mobil SHC 630	Shell Omala S4 GX 220
	Barrier Fluid:	Refer to pump O & M Manual	Refer to pump O & M Manual	Refer to pump O & M Manual	Refer to pump O & M Manual	Refer to pump O & M Manual	Refer to pump O & M Manual	Refer to pump O & M Manual	Refer to pump O & M Manual	Refer to pump O & M Manual	Refer to pump O & M Manual	Refer to pump O & M Manual
Food Grade Pumps (3)	Gear:	Castrol Optileb GT 220	CLP HC (synthetic oil) DIN 51517	H1 Food Grade Gear Lubricant	N/A	Castrol Optileb GT 220	Chevron Lubricating Oil ISO FM 220	Grainger #6HHA7 (5 gal.) (Mobil SHC Cibus 220)	Klüberoil 4 UH1-220 N	Lubriplate FMO-1100 AW	Mobil SHC Cibus 220	Shell Cassida Fluid GL 220
	Inter-mediate:	Castrol Optileb HY 68 (3)	HLP HC (synthetic oil) DIN 51524 (3)	H1 Food Grade Hydraulic Oil (3)	N/A (3)	Castrol Optileb HY 68 (3)	Chevron Lubricating Oil ISO FM 68 (3)	Grainger #6HHC2 (5 gal.) (Mobil SHC Cibus 68) (3)	Klüberoil 4 UH1-68 N (3)	Lubriplate FMO-350 AW (3)	Mobil SHC Cibus 68 (3)	Shell Cassida Fluid HF 68 (3)
Pumps for Sugar (4)	Gear:	Castrol Optileb GT 220	CLP HC (synthetic oil) DIN 51517	H1 Food Grade Gear Lubricant	N/A	Castrol Optileb GT 220	Chevron Lubricating Oil ISO FM 220	Grainger #6HHA7 (5 gal.) (Mobil SHC Cibus 220)	Klüberoil 4 UH1-220 N	Lubriplate FMO-1100 AW	Mobil SHC Cibus 220	Shell Cassida Fluid GL 220
	Inter-mediate:	Klüberfood NH1 6-10 (4)	CLP HC (food grade synthetic oil) DIN 51757	Quench liquid, sugar dissolving oil	N/A (4)	N/A (4)	N/A (4)	N/A (4)	Klüberfood NH1 6-10 (4)	N/A (4)	N/A (4)	N/A (4)
Alternate Quench Liquids	Inter-mediate:	If switching to (or if pump has) DIN 51517 C-type or CLP-type mineral oil, these lubricants are acceptable (check pump Data Sheet - never mix different oils)			BP Energol CS 68	Castrol Magna 68	Chevron Meropa 68	Grainger #4DNJ9 (1 gal.) or #4DNJ8 (5 gal.) (Mobil DTE Heavy Medium)	Klüberoil GEM 1-68 N	N/A	Mobil DTE Oil Heavy Medium (Ambrex 68)	Shell Vitrea 68
		Lubricant Distributor Locators→	http://www.bp.com/loadDistributorLocatorAction.do?categoryId=2200 http://www.castrol.com/castrol/iframe.do?categoryId=9021346&contentId=7038271 http://www.chevron.com/chevron/marketer-locator.aspx www.grainger.com http://www.kluebe.com/us/en/ http://www.lubriplate.com/locator/index.asp?zipMilesLow=0&zip1=55317&zipMilesHigh=35 http://www.host.exxonmobil.com/channelpartners/ns_distributor_directory.jsp http://www.shell.us/home/page/usa/products_services/solutions_for_businesses/shell_lubricants_tpk/distributor_locator/app_distributor_locator.html									

1) Boerger factory standard gear and quench lubricants for Pumps and Multicrushers, when not specified otherwise. Always check the equipment Data Sheet for lubricant types.

2) Boerger factory standard quench lubricants for Multichoppers and Rotorrake, when not specified otherwise. Always check the equipment Data Sheet for lubricant types.

3) For wine pumps, quench liquid is water mixed with food grade glycerin (minimum 30% water to 70% glycerin, maximum 50% water to 50% glycerin).

4) Other sugar dissolving quench liquids for Sugar Pumps are: Fuchs Lubritech FM Sugar Dissolving Fluid; and Lubrimaxx Sugar Dissolving Oil.

NOTE: Lubricants of different types or from different manufacturers must not be mixed together. Refer to equipment Data Sheet and Boerger O & M Manual.