

LubriTec

Synthetic Lubricant Cross Reference Chart Series



Synthetic Fire Resistant Hydraulic Fluids

	Name	ISO 32	ISO 46	ISO 68	ISO 100	Remarks
Advance Petrochem (India)	Fire Resistant Hydraulic Fluid Phosphate					Phosphate Ester
Allegheny Petroleum	Altrasafe PE		200	300	500	Phosphate Ester
	Altra FR 200 WG		(200)			Water Glycol
Aluchem (Italy)	Alusynt Dinal HFR		46	68	100	
Amalie	Water/Glycol FR Fluid		200			Water Glycol
American Agip	FC 200		FC 200			Water Glycol
	PE 200		PE 200			Phosphate Ester
American Chemical Tech.	FR WG		200-D	300-D		Water Glycol
	FR WG		46-HP			Water Glycol
	EcoSafe FR		46	68	100	POE, HF-D
	EcoSafe EHC		46	68		PAG
American Lubricants	Syn WG FR Fluid		(46)			Water Glycol
Aral (Germany)	Montral 44		(46)			Water Glycol
Aztec (UK)	Water Glycol Hydraulic 46		(46)			Water Glycol
BASF	Plurasafe WGF 200D	150	200	300		Water Glycol, ethylene
	Plurasafe WGF 200E	150	200	300		Water Glycol, diethylene
BP	Enersyn SF-		C 46			Water Glycol
	Enersyn SF-		E 46	E 68		POE
Bechem (Germany)	Hydrostar TE			68S		Water Glycol
Benz Oil	BFR Fluid		46			Water Glycol
	Petraulic Sure Safe					Water Glycol
	Ultraguard 522			68		POE
Caltex	Hydraulic Safety Fluid		(46)			Water Glycol
	RPM FR		46			Phosphate Ester
Cam2	Fire Resistant Fluid FR 200 WG		(46)			Water Glycol

Lubrication Technologies
Houston, TX 77024

www.lubritec.biz

	Name	ISO 32	ISO 46	ISO 68	ISO 100	Remarks
Castrol	Anvol SWX 46 FM		46			HFDU Polyol Ester
	Anvol SWX 68 FM			68		HFDU Polyol Ester
	Anvol WG		46			Water Glycol
	Anvol PE 46		46			Phosphate Ester
	Synthetic Fire Resistant (SFR)		46	68		POE
	Hydrasafe 200		(200)			Water Glycol
	Transaqua DW					Water Glycol
	Transaqua HT					Water Glycol
Chem-Sol Chemtool	Tribol 1440					Phosphate Ester
	Tribol 1444-		46	68		POE
	Supreme Performance Fire Retardant Hydraulic Oil (SPFRHF)					Water Glycol
	Chemtolubric					POE
Chevron	Lubricast 902 LPC					Water Glycol
	HP-5046					Water Glycol
CITGO	Hydraulic Fluid WG					Water Glycol
Conoco	Glycol FR-		40XD, 5046HP			Water Glycol
CPC (Taiwan)	FC Fluid D		46			Water Glycol
	Syndustrial FR Hydraulic Fluid		46	68	100	
	Fire Resistant Hydraulic Fluid (14 cSt at 40C)					
	Fire Resistant Hydraulic Fluid Type II					
CPI	Hydraulic Oil WG		(41 cSt at 40C)			Water Glycol
	1550-		46			Water Glycol
DA Stuart	Dasco FR 204 B		(46)			Water Glycol
	Dasco FR 205 B		(46)			Water Glycol
Dow/Union Carbide	UCON Trident AW	32	46	68		Anhydrous PAG
	UCON PowerPro AW	32	46	68		Anhydrous PAG
	UCON Hydrolube HP 5046		(46)			Water Glycol
	UCON Hydrolube DG-	732	746	760		PAG, Dyed
Elf	UCON Hydraulic Fluid WS-34	(32)				Anhydrous PAG
	Hydransafe HFC 146		(46)			Water Glycol
	Hydransafe HFDU 46		(46)			POE
Exxon	Hydransafe HFDR					Phosphate Ester
	Firex		HF-C 46			Water Glycol, available only in Canada, under Esso brand
Forsythe	Firex			HF-DU 68		POE, available only in Canada, under Esso brand, see below
	No-Fire HP-WG-46B		46			Water Glycol
Fuchs	FR Fluid G 200		46			Water Glycol
	Hydrotherm 46 M		(46)			HFC, Water Glycol
	Renosafe DU 46		(46)			HFD-U
Great Lakes Chemical (Chemtura)	Plantoflux AT-S		46	68		HFD-U
	Reolube HYD 22	32, 32B	46, 46B	68, 68B	100B	Aryl Phosphate
Gulf Oil	Reolube Turbofluid	32B GT				Phosphate Ester
Gulf Oil Ltd	FR G 200		46			Water Glycol
Hill & Griffith	Turbofluid 46 XC		(46)			Phosphate Ester
	Griflube Aquatech FR 200		(46)			Water (Diethylene) Glycol

	Name	ISO 32	ISO 46	ISO 68	ISO 100	Remarks	
Houghton	Houghto-Safe		1055, 1110, 1114, 1115, 1120, 1130			Phosphate Ester	
	Cosmolubric HF		122, 130, 144, 1530			POE	
	Cosmolubric B		220, 230			POE	
	Houghto-Safe		200X, 273CF, 620, 419R, 520, 320			Water Glycol	
	Aqualink 40, 300					Water Glycol	
Hydro Safe	Aqualink HT-804					Water Glycol	
	Water Glycol 200		(46)			Water Glycol	
Igol (France)	Secur Fluid H		(46)			Water Glycol	
Imperial (Canada) (Esso)	FIREXX HF-C 46		(46)			Water Glycol	
	FIREXX HF-DU 46		(46)			POE	
	FIREXX HF-DR 46		(46)			Phosphate Ester	
INA (Croatia)	INA Hidrafluid HFC					Water Glycol	
Irving Oil	Hydraulic Safety Fluid WG					Water Glycol	
	Hydraulic Safety Fluid PE					Phosphate Ester	
	Hydraulic Safety Fluid PO					POE	
JAX/Behnke	Pyro Guard Plus					Water Glycol	
Larson Chem.	Hydro 1250					Water Glycol	
LubePlanet	Fire Resistant Hydraulic Fluid FR-200		(46)			Water Glycol	
Lubricants USA (FINA)	FR Polyfluid 46		(46)			POE	
	Finaphos 46		(46)			Phosphate Ester	
Lubrication Engineers	9455 FR Hydraulic Fluid					POE	
Metalworking Lubricants	Metsafe FR-200					Water Glycol	
	Metsafe FR-310					Phosphate Ester	
Metatron (Mexico)	Metatron 610					Water Glycol	
	Metatron 611					POE	
Mobil	Nyvac FR 200D		(46)			Water Glycol	
	Pyrogard 53					Phosphate Ester	
Monsanto	Pydraul	30E		90E	115E	Phosphate Ester	
Moresco (Thailand)	Hydol H-200		(46)			Water Glycol	
Moroil Technologies			AW 46 PE			Phosphate Ester	
			AW 46 FR			Water Glycol	
Morris (UK)	Liquisafe 46		(46)			Water Glycol	
Nyco	Hydraunycoil FH	4420	4430	4440	4450	POE, HFDU	
Oiltech	Aerolene SHF					POE	
	Hydrofluid HFR			46	68	Ester	
Pennzoil	Glycol FR Fluid			46		Water Glycol	
	Pennzsafe FE					Phosphate Ester	
	Pennzsafe SL					POE	
Petronas (Malaysia)	Hidraulik Syn FP		(46)			Phosphate Ester	
	Hidraulik Syn FR 46		(46)			Water Glycol	
Petronomics		54100	54104	54106	54112	POE	
		55250	55254	55256		Water Glycol	
			55260	55262	55264	Water Glycol	
		56020	56022	56024	56026	56028	Water Glycol
			58100	58102	58104		POE

	Name	ISO 32	ISO 46	ISO 68	ISO 100	Remarks
Phillips 66	Syndustrial FR Hydraulic Fluid		46	68	100	
PICO Chemical	FRHH					POE
	WGHF					Water Glycol
PureLube	PureSafe FR-200		(46)			Water Glycol
	PureSafe FR-310					Phosphate Ester
Quaker Chemical	Quintolubric 822-200		(46)			POE
	Quintolubric 822-300			(68)		POE
	Quintolubric 822-450				(100)	POE
	Quintolubric 888		(46)			POE
Repsol (Spain)	Sintetico Comander EHC		(46)			EHC Steam Turbine
Royal Manufacturing	FR-40XD		(46)			Water Glycol
Schaeffer	265 Glygo Fluid		(46)			Water Glycol
	620 Syquench			(68)		POE
Sentinel	S FRIT		(46)			POE
	SCH (ISO 15)					POE
	S-FRH 46		(46)			POE
	S FRNG					Water Glycol
Setral (Germany)	HYD SE-HFD 46 EP		(46)			Phosphate Ester
Shell	Irus Fluid C-NA		(46)			Water Glycol (diethylene)
	Irus Fluid DU-NA		46	68		Ester
	Irus Fluid DR					Tri-aryl Phosphate
	Turbo DR		46			Tri-aryl Phosphate
Shell Canada	No Fire WG 200R		(46)			Water Glycol
SLFi	FRHF-	32	46	68		POE
Solutia	Skydrol MCS 2361					Aviation Phosphate Ester
	Skydrol LD-4					Aviation Phosphate Ester
	Skydrol 500B-4					Aviation Phosphate Ester
	Skydrol 5					Aviation Phosphate Ester
Stirling	Water Glycol HF					Water Glycol
Supresta	Fyrquel	150	220	300	550	Phosphate Ester
	Fyrquel		220N			Phosphate Ester
	Fyrquel		220 MLT			Phosphate Ester
	Fyrquel EHC, EHC-N, EHC-S		(46)			Phosphate Ester
	Fyrquel L					Phosphate Ester
	Fyrquel GR		46	68		Phosphate Ester
	Fyrquel GT					Phosphate Ester
	Fyrquel LT					Phos. Ester/AB
	Fyrlube 15					Phosphate Ester
Texaco	Hydraulic Safety Fluid (766)		(46)			Water Glycol
Thermal-Lube	XL-5000		(46)			Water Glycol
Total	Hydransafe HFC146		(46)			Water Glycol
Tower	FR Fluid 40		(46)			Water Glycol
Tribology Tech-Lube	FRH 200		(46)			POE
	600 WS					Water Glycol

Lubrication Technologies
Houston, TX 77024

www.lubritec.biz

	<i>Name</i>	<i>ISO 32</i>	<i>ISO 46</i>	<i>ISO 68</i>	<i>ISO 100</i>	<i>Remarks</i>
Tri State Industrial	AFHAW					Water Glycol
Unicorn (Singapore)	Hydraulic HFC 46		(46)			Water Glycol
Uniqema	Emkarox HV20 & HV45 base stock					HFC type, Water Glycol
	Prolube 1446, 1556, 1427, 2082, 2031, 1445 base stock					HFD-U type, POE
Veoil (Thailand)	Indpro Fire Safe WG 46		(46)			Water Glycol
Verkol (Spain)	Resfluid HFDU			68		POE
	Glynkol		46			Water Glycol
Wallover	WOCOSAFE		46WG			Water Glycol
Yale Selco (India)	Selco Hydrolube SF-315		(46)			Water Glycol
	Selco Hydrolube SF-316		(46)			Water Glycol
76 Lubricants	FR Fluid Glycol		(46)			Water Glycol
	Syndustrial FR Hydraulic Fluid		46	68	100	

Fire Resistant Hydraulic Fluid Legend

HFA	95/5 fluids, or high water content hydraulic fluids, or oil-in-water emulsions
HFB	water in oil emulsions, often referred to as 60/40 or invert emulsions
HFC	water/glycol hydraulic fluid
HFD	water-free synthetic fire resistant hydraulic fluid based on organic esters, typically phosphate ester
HFD-U	water-free synthetic fire resistant fluids based on polyol esters

Notes, disclaimer, and copyright:

1. The intention of this study was to list only finished synthetic lubricants made from Group IV and Group V synthetic base oils.
2. All the above lubricants are full synthetic; non are para-synthetic or semi-synthetic.
3. A few of the above listed lubricants may no longer be marketed, but were intentionally listed so that the user of these charts could determine a suitable replacement for a recently obsoleted lubricant.
4. This chart is only intended as a list of similar synthetic lubricants. LubriTec does not intend to represent that all the lubricants listed herein are necessarily of the same quality or offer the same level of performance in all instances. Quality and performance can vary.
5. Disclaimer: every reasonable effort was taken to insure that these charts are as accurate as possible; however, we will not be responsible any liability for any errors or inaccuracies. LubriTec will not be held responsible for any decisions made as a result of the information provided above. These charts should be used only as a guide. Products should be verified with supplier.
6. LubriTec is the owner of copyright, database rights and all intellectual property rights of these charts; they shall not be copied (except for one personal use copy), modified, distributed, re-transmitted in total or any part thereof, without the prior written consent of LubriTec.

© Copyright 2006 Lubritec All Rights Reserved

Lubrication Technologies
Houston, TX 77024

www.lubritec.biz