

Product Description

D-A **HydraSafe™** is a specially designed hydraulic fluid for use in monitored or environmentally sensitive heavy-duty applications. This premium lubricant begins with naturally high viscosity index base oils for temperature shear stability and is formulated with our advanced **ChemGuard™** additive technology.

The D-A proprietary **ChemGuard™** innovative formula has vigorous EP/anti-wear inhibitors resulting in wear control on steel, brass, and bronze parts. An exceptional anti-rust and anti-oxidation additive has been included to significantly limit rusting of ferrous and corrosion of yellow metals. In addition, the robust D-A **ChemGuard™** technology improves demulsification, provides hydrolytic stability, and greatly reduces foaming, sludge and varnishing. This environmentally responsible zinc and calcium free formula also provides excellent air release characteristics and cold temperature pumping capability. D-A **HydraSafe™** is rigorously tested for its durability as well as its environmentally safe, low toxicity component performance. D-A **HydraSafe™** may be utilized to protect and extend equipment life in mobile or stationary hydraulic systems, agriculture, forestry, mining, dredging, off-shore platforms, tunneling, waste management and many other environment sensitive areas.

Product Features and Benefits

Naturally high viscosity index base oils provide temperature shear stability.

Vigorous EP/anti-wear inhibitors control wear on steel, brass and bronze parts.

Exceptional anti-rust and anti-oxidation additive limit oxidizing of ferrous metals and corrosion on yellow metals.

Zinc and Calcium free formulation provides excellent air release characteristics and cold pumping capability.

Typical Applications

Axial Piston Pumps	Fives P-68 (ISO 32), P-69 (ISO 68), P-70 (ISO 46)
Construction Machinery	DIN 51524-2
Hydraulic Power Systems	Eaton 35VQ25 - all grades
Hydraulic Drills	ISO 1158 HM
Piston Pumps	ISO 20763
ASTM D6158	Parker Hannifin HF0, HF1, HF2 - all grades
	SAE MS 1004

Typical Properties

Applies to all grades:

	<u>Standard</u>	<u>Test Data</u>	<u>Classification</u>
Toxicity	OECD 203	96-h LL50>1000	Non-Toxic
Biodegradability	OECD 301B	22% @ 28 days	Inherently biodegradable

ISO Viscosity Grade	Test Method	32	46	68
Viscosity @ 100°C, cSt	ASTM D445	5.56	7.0	8.97
	ASTM D445	32	46	68
Viscosity Index	ASTM D2270	110	108	105
Pour Point, °F (°C)	ASTM D97	-29 (-34)	-26 (-32)	-22 (-30)
Flash Point, COC, °F (°C)	ASTM D92	400 (204)	425 (218)	440 (227)
API Gravity	ASTM D4052	32.0	31.6	31.0
Zinc, ppm typical	ASTM D4951	Nil	Nil	Nil

D-A Part Number:

Bulk	55071	55081	55061
Tote – 330 Gal	N/A	N/A	55063
Drum – 55 Gal	55072	55082	55062
Pail (Plastic) – 5 Gal	55078	55088	N/A