

TECHNICAL DATA SHEET

BIODRAULIC SERIES



DESCRIPTION

The Gulf Western Biodraulic series of hydraulic fluids are designed to replace antiwear, mineral-oil based hydraulic fluids used in fire hazardous and environmentally sensitive hydraulic applications while significantly enhancing overall hydraulic system operation due to the inherent high level of thermal stability and resistance to oxidation.

SUMMARY OF BENEFITS

- **PERFORMANCE** - Based on full TMP synthetic ester technology, the Biodraulic series offers far higher performance levels, compared to mineral based products, particularly when operating in high temperature and extended service applications. The range provides superior oxidation resistance, allowing longer service life, and a very high natural viscosity index which ensures "stay in grade viscosity" due to increased resistance to shear down in high stress applications.

PROPERTIES - COMPATIBILITY

The Biodraulic series is compatible with iron and steel alloys and most nonferrous metals and their alloys. They are not compatible with lead, cadmium, zinc and alloys containing high levels of these metals. The products are compatible with multi-component epoxy coatings, but not with zinc-based coatings.

The products are compatible with nearly all mineral oil type hydraulic fluids. They are not miscible or compatible with water containing fluids and these fluids must be removed from the system prior to using the Biodraulic product.

BIODRAULIC SERIES	TEST METHOD	UNITS	46	68
DENSITY @ 15°C	ASTM D1298	g/cm ³	0.90	0.91
KINEMATIC VISCOSITY				
@ 40°C	ASTM D445	cSt	46	68
@ 100°C	ASTM D445	cSt	10	14
VISCOSITY INDEX	ASTM D2270	-	212	215
ACID NUMBER (MG KOH/G)	-	-	2.0	1.5
FLASH POINT (COC)	ASTM D92	°C	260	260
FIRE POINT	ASTM D92	°C	288	315
AUTO IGNITION TEMPERATURE	-	°C	450	450
GEAR LUBRICATION	-	FZG	>12	>12
COLOUR	Yellow to Amber Fluid	-	-	-

Typical characteristics are only a guide to industry and are not necessarily manufacturing or marketing specifications and do not constitute any legal liability.

January 2023

GULF WESTERN PREMIUM QUALITY LUBRICATING OILS (AUST) PTY LTD

Head Office: 92-96 Links Road, St Marys NSW 2760 - PO BOX 515 Kingswood, NSW 2747
 Phone: 02 9673 9600 - Fax: 02 9623 6466 - Email: sales@gulfwestern.com.au - Web: www.gulfwestern.com.au

TECHNICAL DATA SHEET

BIODRAULIC SERIES



ELASTOMER COMPATIBILITY

ISO 1629	DESCRIPTION	STATIC	MILD DYNAMIC	DYNAMIC
NBR	Medium to high nitrile rubber (Buna N, >30% acrylonitrile)	C	C	C
NBR	Low nitrile rubber (Buna N, <30% acrylonitrile)	S	N	N
FPM	Fluoroelastomer (Viton®)	C	C	C
CR	Neoprene	S	S	S
IIR	Butyl rubber	S	N	N
EPDM	Ethylene propylene rubber	N	N	N
AU	Polyurethane	C	C	C
PTFE	Teflon	C	C	C

C = Compatible

S = Satisfactory for short-term use, but replacement with a completely different elastomer is recommended at the earliest convenience

N = Not compatible

STORAGE INSTRUCTIONS & HEALTH, SAFETY AND ENVIRONMENT INFORMATION

All packages should be stored under cover to avoid the possible ingress of water and the obliteration of drum markings. Products should not be stored above 60°C. Health, safety and environmental information is provided for this product in the relevant Materials Safety Data Sheet, which can be obtained by contacting Gulf Western Oil on: 02 9673 9600. Safety: The Biodraulic series hydraulic fluids are fire resistant. In case of a fire, the product's self extinguishing properties limit the spread of the fire. Toxicity: The products are non-toxic, non-irritating and contain no hazardous ingredients.

AVAILABLE PACK SIZES

46: 205LT - 40002, 20LT - 42002 | 68: 205LT - 40009, 20LT - 42009

January 2023

GULF WESTERN PREMIUM QUALITY LUBRICATING OILS (AUST) PTY LTD

Head Office: 92-96 Links Road, St Marys NSW 2760 - PO BOX 515 Kingswood, NSW 2747
 Phone: 02 9673 9600 - Fax: 02 9623 6466 - Email: sales@gulfwestern.com.au - Web: www.gulfwestern.com.au