

BIO-HYDRAULIC

Biodegradable Hydraulic Oil



Features & Benefits

- Excellent all-round performance
- Biodegradable with low toxicity
- Wide operating temperature range a natural multi-grade
- Suitable for all types of pumps, even those with silver-plated parts

Meets or Exceeds manufacturers and industry test standards	
OECD 201	X
OECD 301B (Modified sturm)	X

BIO-HYDRAULIC oil was specifically designed for any hydraulic system working in an environmentally sensitive area. Such areas dictate the use of oil where spills and leaks must have the least possible effect on animal, plant and water. Irving Bio-Hydraulic uses special biodegradable Canola oil coupled with low toxicity additives. Choose this environmentally safe product without sacrificing the levels of performance that industrial customers require from their hydraulic oils.

BIO-HYDRAULIC'S base oil mix has excellent stability with enhanced oxidation resistance due to a special low-toxicity additive. It was deemed particularly important that this oil provide the same wear-protection as premium mineral based hydraulic oils which were achieved without the use of zinc-containing components.

BIO-HYDRAULIC oil meets or exceeds all the major pump manufacturer's toughest fluid requirements. These include but are not limited to; fluid life, wear prevention, hydrolytic stability, filterability, foam resistance, water separation, corrosion and rust prevention.

BIO-HYDRAULIC oil has the wide operating temperature range typical of a multi-graded mineral oil. Although it has a nominal ISO grade of 46, it offers the low-temperature fluidity of an ISO 32 grade with the high temperature viscosity of an ISO 100 grade. Unlike some multi-grade mineral oils, Bio Hydraulic will retain the aforementioned characteristics in a high-shear environment. Biodegradability of the oil has been tested according to two accepted standards with toxicity levels well below current recommended limits.

Sizes & Order Codes

BIO-Hydraulic 46 18.9L (5.0 US Gal)
F0083040
Bulk
B0000301

Typical Results

ISO GRADE	46
DENSITY @ 15°C (D4052), kg/l	0.9170
COLOUR (D1500)	2.0
VISCOSITY (D445) CST @ 40°C	50.9
CST @ 100°C	11.1
VISCOSITY INDEX (D2270)	217
POUR POINT (D97), °C	-30
OXIDATION LIFE (D943), HRS	1000+
FLASH POINT (D92), °C	162
ACID NUMBER (TAN)(D974), mgKOH/g	0.69
FZG LOAD STAGE (PASS)	11
ZINC CONTENT (%WT)	<0.005
USEFUL OPERATING TEMPERATURE, °C, MIN/MAX	-20°C / 90°C
COPPER CORROSION 3H/100°C	1a
DIELECTRIC STRENGTH, kv (ASTM D877)	66



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Supporting data available to demonstrate appropriate performance.
Check with your Sales Representative for latest product approvals.
Please note, these are typical performance indicators and can change without notice.
This data sheet supersedes any previous version prior to 5/25/2018