

# FLUID BIO S

SYNTHETIC BIODEGRADABLE  
HYDRAULIC OILS

220013-220014-220049/09.24

Rev. 2

## DESCRIPTION & APPLICATIONS

FLUID BIO S is adapted for hydraulic systems that operate under harsh conditions and using an oil with high anti-wear properties and a stable high viscosity index is required.

FLUID S BIO is widely recommended where the environment may be threatened by oil leakage or loss.

FLUID BIO S requires no special indication, this oil can be used anywhere a conventional mineral hydraulic oils are required.

Its high natural viscosity index enables various viscosity grades to bridge.

ATTENTION: Since Fluid Bio S has a fully saturated and fully synthetic ester base, it is not recommended to mix it with mineral or vegetable oils.

## ADVANTAGES

- Biodegradability: thanks to the biological primary biodegradability of > 95% according to standardized test CEC L-33-A-93 and the ultimate biodegradability of > 98% according to standardized test OECD-301-D that minimizes FLUID BIO S the polluting effects on the environment by accidental discharge or leakage.
- Oiliness: thanks to its synthetic base oils (HEES) and additives FLUID BIO S have good anti-wear, extreme pressure and anti-corrosion properties, which ensure outstanding lubrication of equipment, even at high pressure.
- Viscosity-temperature relationship: FLUID BIO S has a high viscosity index and natural shear stability which allows very wide usage limits.
- Pour point: FLUID S BIO has a low pour point and good pumpability at low temperatures.
- Stability against oxidation and hydrolysis: due to its base and synthetic additives FLUID BIO S has a good resistance to oxidation and hydrolysis.

## PERFORMANCES

Satisfies to the following specifications:

ISO 15380 HEES

DIN 51524 Teil 3 HVLP

ISO 6743 HV

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## ENVIRONMENT, HEALTH & SAFETY

Please consult also the Safety Data Sheet about how to manipulate and to stock the product as well as to learn about the first aid measurements in case of accident.

Elimination after use must be made in conformity with the local rules in force about used oils disposal. When needed, Safety Data Sheet can be obtained upon request.

Conservation of the product: 3 year(s) in closed container and sheltered.

## PROPERTIES

CHARACTERISTICS	UNITS	METHODS	TYPICAL DATA		
ISO VG	-	-	15	22	46
Density at 15°C	kg/m <sup>3</sup>	NFT 60101	933	945	959
Kinematic viscosity at 40°C	mm <sup>2</sup> /s (cSt)	NFT 60100	15.2	20,8	46,7
Kinematic viscosity at 100°C	mm <sup>2</sup> /s (cSt)	NFT 60100	3.8	4,6	9,3
Viscosity index	-	NFT 60136	142	142	187
Pour point	°C	NFT 60105	-42	-42	-40
Biodegradability	%	CEC-L-33-A-93	> 95	> 95	> 95
Biodegradability	%	OECD-301-D	> 98	> 98	> 98
Product number	-	-	220049	220013	220014

*The average values are given for information only.*