



BIO HYDRAULIC V TYPE OILS

PRODUCT DESCRIPTION

Hi-Tec Bio Hydraulic V Type Oils are bio-degradable ISO grade hydraulic lubricants containing vegetable oil based esters and high performance additive packages. They are designed to meet the requirements of ISO 15380:2002, are classified under ISO 6743-4 as Type HETG and are bio-degradable according to OECD 301B.

BENEFITS

Hi-Tec Bio Hydraulic V Type Oils do not contain mineral lubricating oils: they are based on high quality vegetable oil esters, which in comparison with mineral oil based lubricants are more easily bio-degraded, less hazardous and more suitable for use in environmentally sensitive areas. They are much less likely to cause any harm to soil, waterways or other parts of the environment than mineral oil based lubricants.

Hi-Tec Bio Hydraulic V Type Oils display excellent viscosity - temperature characteristics due to the high inherent viscosity index of vegetable oil esters. Their optimum operating temperature range is from -10°C to 65°C.

Compared with mineral oil based lubricants **Hi-Tec Bio Hydraulic V Type Oils** are:

- Safer for users and the environment
- More easily bio-degradable
- Lower in toxicity – free from heavy metals
- Enhanced in performance characteristics
- Less changeable in viscosity as operating temperatures increase due to higher viscosity index
- Higher in lubricity resulting in lower equipment operating temperatures

APPLICATIONS

Hi-Tec Bio Hydraulic V Type Oils were developed to meet and exceed the current requirements of the agricultural, forestry, heavy engineering, construction and marine equipment industries.

Hi-Tec Bio Hydraulic V Type Oils can be used in mobile or stationary equipment such as forklifts, cranes, tractors, graders, bulldozers, hoists, marine equipment, mining equipment, ski lifts etc. and are particularly suited to use in environmentally sensitive areas such as:

- National or State parks
- Near or on waterways
- Recreational areas
- Road, rail and tramways
- Local Government Maintenance Vehicles
- Water, Electricity, Telecommunication and Gas Service providers etc.

Hi-Tec Bio Hydraulic V Type Oils are fully miscible and compatible with mineral oils meaning changing to **Hi-Tec Bio Hydraulic V Type Oils** is simple as no prior system flushing is required.

Hi-Tec Bio Hydraulic V Type Oils contain ester components which may be incompatible with certain elastomers used as seals, hoses or other components. Prior to full scale commercial use, it is recommended that compatibility with system components is determined by the user. For further advice contact your local reseller or supplier.

Avoid contamination with water. Where possible drying equipment should be used and water drained after any shutdown period.

Hi-Tec suggests that the equipment manufacturers' recommendations for viscosity grade, performance requirements and general operating conditions should be checked prior to use.

TYPICAL PROPERTIES

Property	Unit	ASTM Method	Typical Results		
Item Code (HI5-)	-	-	2909	2917	2922
ISO Viscosity	-	-	32	46	68
Appearance	-	Visual	Clear yellow liquid		
Odour	-	-	Bland fatty		
Density @ 15°C	kg/L	D4052	0.92		
Kinematic Viscosity @ 40 °C	mm ² /s	D445	32	46	68
Kinematic Viscosity @ 100 °C	mm ² /s	D445	7.6	9.9	13.2
Viscosity Index	-	D2270	220	210	200
Pour Point	°C	D97	-15		
Flash Point Open Cup	°C	D92	>150		
Corrosiveness to Copper	-	D130	1a		
Rust Preventing Characteristics	-	D665	Pass A & B		
Sulphated Ash	%m/m	D874	0.01		
Water Content	%v/m	D95	<0.1		