

PURUS® PURShield™ FULL SYNTHETIC ZINC-FREE AW HYDRAULIC OILS

DESCRIPTION: PURUS® PurShield™ Full Synthetic Zinc-Free AW Hydraulic Oils are high quality zinc-free biodegradable hydraulic oil offering excellent oxidation protection with a unique zinc-free additive system. These biodegradable Zinc-Free oils are available in an ISO 32 and 46 viscosity ranges to meet many equipment specifications.

APPLICATION: PURUS® PurShield™ Full Synthetic Zinc-Free AW Hydraulic Oils are formulated to replace conventional zinc-containing hydraulic fluids where the environment is of utmost concern. Formulated with synthetic ester base oils, these products provide the optimum balance between performance and protection of our environment. Intended applications include equipment used in marine environments, parks, wild life areas, recreational areas, golf courses, mines, etc. Biodegradable Full Synthetic Zinc-Free Hydraulic Oil minimizes the environmental impact of accidental leaks and spills.

Recommended Applications: Vickers 104C Vane Pump Test

PERFORMANCE BENEFITS: PURUS® PurShield™ Full Synthetic Zinc-Free AW Hydraulic Oils are blended with selected premium quality base oils and selected additives to provide these essential characteristics:

- Readily Biodegradable.
- Contains no Zinc or other heavy metals.
- Filterability and demulsibility.
- Excellent thermal and oxidation stability

TYPICAL PROPERTIES±:

	ASTM D-2422	32	46
ISO-Viscosity Grade			
Specific Gravity	ASTM D-4052	0.912	0.914
Flash Point °F/°C	ASTM D-92	328 (164)	500 (260)
Pour Point °F/°C	ASTM D-97	-65 (-54)	-65 (-54)
Viscosity @ 40 °C	ASTM D-445	33.7	45.9
Viscosity @ 100 °C	ASTM D-445	8.0	11.0
Viscosity Index	ASTM D-2270	223	241
ASTM Rust Test	ASTM D-665 A&B	Pass	Pass
Acid Number mg KOH/g	ASTM D974	0.3	0.3
Copper Corrosion	ASTM D130	Pass	Pass
4 Ball Wear Test	ASTM D4172	0.45	0.42
Aquatic Toxicity, Rainbow Trout 1000mg/L 96h LC50	OECD 203 1-12	Non-toxic	Non-toxic
Biodegradability in 28 days	OECD 301B, %	>70	>70

PINESFSAWHYD
Revised: 03/2023



±Due to continual product research and development, the information contained herein is based on products purchased in the U.S. and subject to change without notification. Typical properties may vary slightly. Minor variations in product typical test data are to be expected in normal manufacturing

This data sheet and the information it contains is believed to be accurate as of the date of printing. However, no warranty or representation, express or implied, is made as to its accuracy or completeness. Data provided is based on standard tests under laboratory conditions and is given as a guide only. Users are advised to ensure that they refer to the latest version of this data sheet. It is the responsibility of the user to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations. Safety Data Sheets are available for all our products and should be consulted for appropriate information regarding storage, safe handling, and disposal of the product. No responsibility is taken by either AIOD or its affiliates for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from hazards inherent in the nature of the material. All products, services and information supplied are provided under our standard conditions of sale. You should consult your local AIOD Distributor if you require any further information.

Association of Independent Oil Distributors • www.purusproducts.com • P.O. Box 1861 • Montrose, CO 81402 USA

PURUS® PurShield™ SYNTHETIC BLEND ZINC-FREE AW HYDRAULIC OILS

DESCRIPTION: PURUS® PurShield™ Synthetic Blend Zinc-Free AW Hydraulic Oils are high quality zinc-free biodegradable hydraulic oil offering excellent oxidation protection with a unique zinc-free additive system. These biodegradable Zinc-Free oils are available in an ISO 32 and 46 viscosity ranges to meet many equipment specifications.

APPLICATION: PURUS® PurShield™ Synthetic Blend Zinc-Free AW Hydraulic Oils are formulated to replace conventional zinc-containing hydraulic fluids where the environment is of utmost concern. Formulated with a blend of vegetable and synthetic ester base oils, these products provide the optimum balance between performance and protection of our environment. Intended applications include equipment used in marine environments, parks, wild life areas, recreational areas, golf courses, mines, etc. Biodegradable Synthetic Blend Zinc-Free Hydraulic Oil minimizes the environmental impact of accidental leaks and spills.

Recommended Applications: Vickers 104C Vane Pump Test

PERFORMANCE BENEFITS: PURUS® PurShield™ Synthetic Blend Zinc-Free AW Hydraulic Oils are blended with selected premium quality base oils and selected additives to provide these essential characteristics:

- Readily Biodegradable.
- Contains no Zinc or other heavy metals.
- Filterability and demulsibility.
- Excellent thermal and oxidation stability

TYPICAL PROPERTIES±:

	ASTM D-2422	32	46
ISO-Viscosity Grade	ASTM D-2422	32	46
Specific Gravity	ASTM D-4052	0.912	0.914
Flash Point °F/°C	ASTM D-92	328 (164)	500 (260)
Pour Point °F/°C	ASTM D-97	-30 (-34)	-32.8 (-36)
Viscosity @ 40 °C	ASTM D-445	36.9	43.4
Viscosity @ 100 °C	ASTM D-445	8.1	9.65
Viscosity Index	ASTM D-2270	202	212
ASTM Rust Test	ASTM D-665 A&B	Pass	Pass
Acid Number mg KOH/g	ASTM D974	0.3	0.3
Copper Corrosion	ASTM D130	Pass	Pass
4 Ball Wear Test	ASTM D4172	0.45	0.42
Aquatic Toxicity, Rainbow Trout 1000mg/L 96h LC50	OECD 203 1-12	Non-toxic	Non-toxic
Biodegradability in 28 days	OECD 301B, %	>70	>70

PINESBAWHYD
Revised: 03/2023



±Due to continual product research and development, the information contained herein is based on products purchased in the U.S. and subject to change without notification. Typical properties may vary slightly. Minor variations in product typical test data are to be expected in normal manufacturing

This data sheet and the information it contains is believed to be accurate as of the date of printing. However, no warranty or representation, express or implied, is made as to its accuracy or completeness. Data provided is based on standard tests under laboratory conditions and is given as a guide only. Users are advised to ensure that they refer to the latest version of this data sheet. It is the responsibility of the user to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations. Safety Data Sheets are available for all our products and should be consulted for appropriate information regarding storage, safe handling, and disposal of the product. No responsibility is taken by either AIOD or its affiliates for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from hazards inherent in the nature of the material. All products, services and information supplied are provided under our standard conditions of sale. You should consult your local AIOD Distributor if you require any further information.

Association of Independent Oil Distributors • www.purusproducts.com • P.O. Box 1861 • Montrose, CO 81402 USA