

**Corrosion Resistance** 

Varnish Reduction

**Reduced Oxidation** 

Seal Compatibility

Extended Drain

# **Puma Heat Transfer Oil 32**

**Puma Heat Transfer Oil 32** is blended using highly refined mineral base oils and specialised high temperature tolerant additive technology to provide high-performance products designed for use in both sealed and open indirect, heat transfer systems. The product design allows it to resist extreme oxidation tendencies and thermal degradation stresses the fluid is normally subjected to

# **Designed to Perform**

### Longer Equipment Life

Puma Heat Transfer Oil 32 is suited for operational temperatures between -10 $^{\circ}$ C and 315 $^{\circ}$ C in SEALED SYSTEMS and for OPEN SYSTEMS it is safe to operate at below 160 $^{\circ}$ C.

The safe performance of this fluid is dictated by its Auto ignition temperatures of > 360°C and *it is critical in recognising this is the limiting temperature that the fluid could spontaneously ignite* at in the presence of oxygen should a leak occur in the heat plant.

### Application

The application of Puma Heat Transfer Oil 32 should be supported by a qualified Heat Transfer Oil Condition Monitoring programme to monitor fluid condition and operational stresses that impact on fluid life. Heat transfer fluid generally degrades at a rate of 0.03% per day or approx 11 % per annum. This will vary greatly on the application of the fluid and its maintenance. Degradation can be arrested when fluids are well managed and operational parameters supported by good SOP and practises.

## **Typical Physical Characteristics**

Test	Temp	Units	Typical Results	
Viscosity Grade ISO	-	-	ISO 3448	32
Viscosity Kinematic	40℃	cSt	ASTM D-445	30
Viscosity Kinematic	100℃	cSt	ASTM D-445	5.6
Viscosity Index	-	-	ASTM D-2270	102
Flash Point COC	-	°C	ASTM D-92	220
Flash Point PMCC	-	٥C	ASTM D-93	204
Auto Ignition point	-	٥C		>360
Max Recommended Operation Temperature		٥C		315
Neutralisation Number mg/KOH/g			ASTM D-974	0.01

These characteristics are typical of current product methods whilst future production will conform to Puma Lubricants specifications, variations in these physical characteristics may occur.

### Health & Safety Environment

- This product is unlikely to present any significant health and safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.
- Avoid contact with eyes and skin, use proper impervious gloves with used oil. After skin contact, wash immediately with soap and water. Guidance on health and safety is available on the appropriate Safety Data Sheet (SDS) which can be obtained from pumaenergypng.datasheetdownloads.com, sds.pumaenergy.com.au.

#### Protect the Environment

#### **Additional Information**

- Take used oil to an authorized collection point. Do not discharge used or new oil into drains, soil or water.
- Technical advice on any applications not covered here may be obtained from your Puma Energy Representative.

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The information contained herein is accurate at the time of this review. However specifications change from time to time. Ensure specifications meet equipment manufacture requirements. Document No: 01/03/2017 | Printed copies are UNCONTROLLED