IND-4031-2209E

SUPER HYRANDO P46

High performance anti-wear hydraulic fluid

SUPER HYRANDO P46 which has flash points above 250 °C is an anti-wear hydraulic fluid suitable for various hydraulic pumps and motors from low pressure to high pressure. When used in a high-pressure pump, **SUPER HYRANDO P46** not only provides excellent wear-prevention but also anti-seizure protection during shock loading. **SUPER HYRANDO P46** has excellent thermal stability and oxidative stability because it uses additives that exhibit sufficient performance even under high temperature conditions.

• SPECIAL FEATURES

1. Guaranteed Flash Points above 250 °C

SUPER HYRANDO P46 has guaranteed flash points above 250 °C and is categorized as "combustible liquids" by Japan's Fire Service Law.

2. Excellent Wear Protection

SUPER HYRANDO P46 has superior anti-wear characteristics to prevent wear on modern high-pressure, high-performance pumps and valves. It also greatly reduces the amount of wear and scuffing in heavily loaded hydraulic system components.

3. Excellent Temperature Characteristics

SUPER HYRANDO P46 has a high viscosity index and low pour point so that temperature-related viscosity change is low.

It exhibits stable performance over a wide temperature range from low temperature to high temperature.

4. Superior Rust Protection

SUPER HYRANDO P46 prevents rust from being caused by moisture mixed in the hydraulic system because it contains an excellent rust preventive additive.

5. Superior Oxidation and Thermal Stability

SUPER HYRANDO P46 is protected against oxidation and thermal degradation even in hydraulic systems with severe operating conditions.

6. Long Service Life

SUPER HYRANDO P46 has superior shearing stability so that there is almost no change in viscosity even during extended periods of use.

Handling requirements for combustible liquids (flash point: 250°C min.) under Japan's Fire Service Law

- 1. Under the Fire Service Law, when combustible liquids (flash point: 250°C min.) are stored together with hazardous materials, they must be kept at least one meter apart.
- 2. In quantities of 2000L and above, combustible liquids (flash point: 250°C min.) are considered "Designated Flammable Goods" and are subject to municipal regulations (in Japan); be sure to familiarize yourself with rules and regulations in your area.

APPLICATIONS

SUPER HYRANDO P46 can be used in a wide range of low- to high-pressure hydraulic machineries including forging presses, metal-working machines, injection molding machines, extruders, machine tools, construction machinery, marine deck equipment, cargo handling machinery, mining machinery and many others.

SHIPPING CONTAINERS

200-liter drums

• TYPICAL PROPERTIES OF SUPER HYRANDO P46

ISO Viscosity grade			46
Color	(ASTM)		L0.5
Density	(15 °C)	g/cm ³	0.848
Kinematic viscosity	(40 °C)	mm^2/s	48.7
	(100 °C)	mm ² /s	7.89
Viscosity index			131
Flash point	(COC)	$^{\circ}\mathrm{C}$	260
Pour point		$^{\circ}\mathrm{C}$	-37.5
Acid number		mgKOH/g	0.44
Copper strip corrosion (100 °C ,3h)			1
Rust test (artificial sea water, 60 °C, 24 h)			No rust

Note: The typical properties may be changed without notice. (August 2022)



Handling Precautions

lacksquare Follow these precautions when handling this product.

Composition:	Base Oil, Additives	
Precautionary pictograms:	s: Not applicable	
Signal word:	Not applicable	
Hazard Statement:	Not applicable	
Precautionary Statements:	Do not handle until all safety precautions have been read and understood.	
Prevention	Wear protective gloves/protective clothing/eye protection/face protection.	
	• Do not allow the eyes to become exposed to the product. Do not swallow the product.	
	Wash hands thoroughly after handling.	
	• Do not eat, drink or smoke when using this product.	
Response	• IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.	
	• IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.	
	• If the eyes are exposed to the product: Rinse the eyes with plenty of running water and	
	immediately contact a physician.	
	• IF ON SKIN: Wash with plenty of soap and water.	
Storage	• The product must be stored in a cool, well-ventilated location where it will not be exposed	
	to direct sunlight.	
	Containers that have been opened must be tightly sealed.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international	
	regulations.	
	• If there are any doubts about proper methods of handling the product, contact the point of	
	purchase before proceeding with usage.	