

SUPER HYRANDO WP

Anti-Wear Long-Life Hydraulic Fluid

SUPER HYRANDO WP (World Product) is hydraulic fluid designed for the rigors of construction machinery applications. **SUPER HYRANDO WP** has exceptional anti-wear and long-life properties. It is also suitable for high-pressure hydraulic systems in forging presses and other large industrial machinery.

SUPER HYRANDO WP is available in three viscosity grades: 32, 46 and 68. VG46 and VG68 have flash points above 250 °C, guaranteed.

● **Special Features**

1. Outstanding anti-wear protection

SUPER HYRANDO WP is formulated with zinc-free extreme pressure additives with exceptional anti-wear properties, to protect against wear problems in high-pressure hydraulic pumps.

2. High oxidation stability and thermal stability

Formulated with highly refined base stock and high performance antioxidants, **SUPER HYRANDO WP** stands up to high temperatures with minimal sludge formation. This helps prevent problems of malfunctioning valves and blocked filters.

3. Excellent anti-stick-slip properties

SUPER HYRANDO WP contains an anti-stick-slip additive to reduce noise from hydraulic cylinders.

4. Superior brake torque performance

SUPER HYRANDO WP outperforms conventional zinc-free hydraulic fluids in braking torque to help prevent problems with hydraulic brakes.

5. Viscosity grades 46 and 68 are “Combustible Liquids”

SUPER HYRANDO WP 46 and **WP 68** are classified as Combustible Liquids under Japan’s Fire Service Law, and have flash points above 250 °C, guaranteed.

● **Handling Requirements for Combustible Liquids under Japan’s Fire Service Law:**

1. Under the Fire Service Law, when combustible liquids are stored together with hazardous materials, they must be kept at least one meter apart.
2. In quantities of 2 KL and above, Combustible Liquids are considered “Designated Hazardous Materials” and are subject to municipal regulations (in Japan); be sure to familiarize yourself with rules and regulations in your area.

● **Applications**

Hydraulic systems in construction machinery, forging presses & other large industrial machinery and industrial vehicles.

● **Containers**

Tank trucks, 200 liter drums & 20 liter pails.

● **Typical properties of SUPER HYRANDO WP**

Grade		VG32	VG46	VG68
Density	(15 °C)	0.846	0.854	0.870
Kinematic viscosity	(40 °C) mm ² /s	34.7	45.7	67.5
	(100 °C) mm ² /s	6.36	7.51	9.09
Viscosity index		136	130	110
Flash point	(COC) °C	246	260	266
Acid number	mgKOH/g	0.07	0.07	0.07
Pour point	°C	-42.5	-35.0	-25.0
Rust prevention (Artificial seawater, 24h)		No rust	No rust	No rust
Copper strip corrosion(100 °C, 3h)		1	1	1
FZG test	(Fail Stage)	12	12	12

Note: The typical properties may be changed without notice. (July 2008)



**Handling
Precautions**

▼ Follow these precautions when handling this product.

Composition :	Base Oil, Additives
Precautionary pictograms:	Not applicable
Signal word:	Not applicable
Hazard Statement:	Not applicable
Precautionary Statements:	<ul style="list-style-type: none"> • Do not handle until all safety precautions have been read and understood. • 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.
Prevention	
Response	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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.