

# HYRANDO WIDE

## A MULTIGRADE, ANTIWEAR HYDRAULIC OIL

**HYRANDO WIDE** is a hydraulic fluid suitable for use in hydraulic equipment that requires minimal viscosity change due to temperature, such as in cold outdoor areas, inside freezers, and other low-temperature environments. **HYRANDO WIDE** is formulated with highly refined base oils and viscosity index improvers, resulting in superior temperature-viscosity characteristics, making it suitable for use across a wide temperature range from low to high temperatures.

### ● SPECIAL FEATURES

#### 1. Superior temperature-viscosity characteristics

**HYRANDO WIDE** has a high viscosity index and a low pour point, resulting in minimal viscosity change with temperature and stable performance across a broad temperature range from low to high.

#### 2. Superior thermal and oxidation stability

**HYRANDO WIDE** utilizes highly refined base oils with extremely low levels of impurities such as sulfur, nitrogen, and resinous materials that are susceptible to heat and oxygen. By carefully blending an appropriate amount of selected additives, it exhibits minimal oxidation and thermal degradation even under high temperature operating conditions, resulting in a long service life.

#### 3. Excellent lubricity

**HYRANDO WIDE** is formulated with superior anti-wear agents, which prevent wear on hydraulic pumps and valves in recent high-pressure, high-performance hydraulic equipment.

### ● APPLICATIONS

1. In construction machinery, flood locks, and other hydraulic equipment used outdoors in cold climates.
2. In hydraulic equipment used in freezers.
3. In measuring gauges and other precision hydraulic devices.
4. In remote-control devices for deck equipment on ships.
5. In a wide range of other hydraulic machinery requiring low pour points and high viscosity indexes.

### ● SHIPPING CONTAINERS

200-liter drum and 20-liter can

### ● TYPICAL TEST DATA FOR HYRANDO WIDE

Viscosity Grade		15	22	32	46	68	100
Color (ASTM)		L0.5	L0.5	L0.5	L0.5	L0.5	L0.5
Density (15°C)	g/cm <sup>3</sup>	0.835	0.836	0.840	0.850	0.866	0.886
Kinematic viscosity	(40°C) mm <sup>2</sup> /s	15.3	20.7	29.8	45.9	69.3	101
	(100°C) mm <sup>2</sup> /s	3.84	4.69	6.04	8.21	10.9	14.2
	(-20°C) mm <sup>2</sup> /s	375	678	1,232	3,102	-	-
Viscosity index		150	151	155	155	148	144
Acid number	mgKOH/g	0.32	0.31	0.31	0.31	0.32	0.36
Flash point (COC)	°C	183	226	234	244	244	246
Pour point	°C	-57.5	-55.0	-45.0	-42.5	-42.5	-37.5
Copper strip corrosion (100°C, 3h)		1	1	1	1	1	1
Rust test (artificial sea water, 24 h)		No rust	No rust	No rust	No rust	No rust	No rust

Note: The typical properties may be changed without notice. (May 2024)



## Handling Precautions

▼ Follow these precautions when handling this product.

### HYRANDO WIDE 15

<b>Composition :</b>	Base Oil (s), Additives
<b>Hazard pictograms:</b>	
<b>Signal word:</b>	Danger
<b>Hazard Statement:</b>	May be fatal if swallowed and enters airways
<b>Precautionary Statements:</b>	<ul style="list-style-type: none"><li>• Do not handle until all safety precautions have been read and understood.</li><li>• Wear protective gloves/protective clothing/eye protection/face protection.</li><li>• Do not allow the eyes to become exposed to the product. Do not swallow the product.</li><li>• Wash hands thoroughly after handling.</li><li>• Do not eat, drink or smoke when using this product.</li></ul>
<b>Response</b>	<ul style="list-style-type: none"><li>• IF SWALLOWED: Immediately call a POISON CENTER/doctor.</li><li>• IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</li><li>• If the eyes are exposed to the product: Rinse the eyes with plenty of running water and immediately contact a physician.</li><li>• IF ON SKIN: Wash with plenty of soap and water.</li><li>• Do NOT induce vomiting.</li></ul>
<b>Storage</b>	<ul style="list-style-type: none"><li>• The product must be stored in a cool, well-ventilated location where it will not be exposed to direct sunlight.</li><li>• Containers that have been opened must be tightly sealed.</li><li>• Store locked up.</li></ul>
<b>Disposal</b>	<ul style="list-style-type: none"><li>• Dispose of contents/container in accordance with local/regional/national/international regulations.</li><li>• If there are any doubts about proper methods of handling the product, contact the point of purchase before proceeding with usage.</li></ul>

### HYRANDO WIDE 22, 32, 46, 68, 100

<b>Composition :</b>	Base Oil(s), Additives
<b>Hazard pictograms:</b>	Not applicable
<b>Signal word:</b>	Not applicable
<b>Hazard Statement:</b>	Not applicable
<b>Precautionary Statements:</b>	<ul style="list-style-type: none"><li>• Do not handle until all safety precautions have been read and understood.</li><li>• Wear protective gloves/protective clothing/eye protection/face protection.</li><li>• Do not allow the eyes to become exposed to the product. Do not swallow the product.</li><li>• Wash hands thoroughly after handling.</li><li>• Do not eat, drink or smoke when using this product.</li></ul>
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