

HYRANDO JINEN TX

Biodegradable and Flame-Retardant Hydraulic Fluid

In hydraulic equipment used in marine, riverine, and lacustrine environments, there is a concern for environmental pollution due to oil leaks. From an environmental protection standpoint, there is a demand for hydraulic fluids with excellent biodegradability. **HYRANDO JINEN TX**, formulated with synthetic fatty acid esters as its base oil, is an Eco Mark-certified product that offers higher biodegradability compared to mineral oil-based hydraulic fluids. Furthermore, due to its high flash and fire points, **HYRANDO JINEN TX** can also serve as a flame-retardant hydraulic fluid.

● Special Features

1. Superior Biodegradability

HYRANDO JINEN TX exhibits superior biodegradability, having passed the OECD 301B biodegradability test with a degradation rate exceeding 60%, the threshold for Eco Mark certification. It is registered as an Eco Mark-certified product (Eco Mark Certification No. 14 110 001).

2. Improved Flame Retardancy

HYRANDO JINEN TX is formulated with synthetic fatty acid esters as its base oil, which provides with superior flame retardancy compared to mineral oils.

3. Enhanced Oxidation Stability

HYRANDO JINEN TX is blended with high-performance antioxidants in its synthetic fatty acid ester base, resulting in enhanced oxidation stability that surpasses that of conventional fatty acid ester-based hydraulic oils.

4. Superior Lubricity and Wear Protection

HYRANDO JINEN TX combines the inherent oiliness of its base oil with high-performance anti-wear agents. This synergy effectively minimizes wear in pumps, valves, and other hydraulic components, ensuring their prolonged and reliable operation even under harsh conditions.

5. Outstanding Viscosity-Temperature Characteristics

HYRANDO JINEN TX is formulated with synthetic fatty acid esters with a high viscosity index, resulting in minimal viscosity changes with temperature fluctuations and excellent low-temperature fluidity. This ensures consistent

lubrication performance over a wide temperature range.

6. Excellent Rust Prevention

HYRANDO JINEN TX, formulated with high-performance rust inhibitors, provides excellent protection against rust caused by moisture in hydraulic systems.

7. Good Compatibility with Metals

HYRANDO JINEN TX exhibits excellent compatibility with metal materials, ensuring minimal impact on the components of hydraulic equipment such as pumps and valves.

8. High Compatibility with Seal Materials

HYRANDO JINEN TX demonstrates compatibility with seal materials that is nearly equivalent to that of mineral oil-based hydraulic fluids.

● Applications

- (1) Construction machinery (hydraulic shovel et al.)
- (2) Hydraulic devices in continuous casting machines and hot rolling mills
- (3) Hydraulic devices of electric and heating furnaces
- (4) Die-casting machines and forging presses
- (5) Hydraulic facilities which have high risk of environmental pollution and the fire by the leak of the oil

● Containers

200-liter drum and 20-liter can

● Typical Properties of HYRANDO JINEN TX


ISO Viscosity Grade			46	56
Color	(ASTM)		0.5	0.5
Density	(15°C)	g/cm ³	0.920	0.920
Kinematic viscosity	(40°C)	mm ² /s	46.3	53.3
	(100°C)	mm ² /s	9.33	10.7
Viscosity index			190	196
Pour point		°C	-40.0	-27.5
Flash point	(COC)	°C	318	314
Fire point	(COC)	°C	368	368
Acid number		mgKOH/g	0.26	0.26
Rust test (artificial sea water, 24 h)			Pass (No rust)	Pass (No rust)
Biodegradability (OECD301B)		%	> 60	> 60

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



Handling Precautions

▼ Follow these precautions when handling this product.

Composition :	Base Oil(s), Additives
Hazard statement:	
Signal word:	Warning
Hazard Statement:	Suspected of causing cancer Harmful to aquatic life Harmful to aquatic life with long lasting effects
Precautionary statements:	<ul style="list-style-type: none"> Do not handle until all safety precautions have been read and understood.
Prevention	<ul style="list-style-type: none"> 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. Avoid release to the environment. Obtain special instructions before use. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.
Response	<ul style="list-style-type: none"> IF SWALLOWED: Immediately call a POISON CENTER/doctor. 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. IF exposed or concerned: Get medical advice/attention.
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. Store locked up.
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.