

ORN SYN HYDRAULIC ISO 10 PN HYD010

Mineral-based hydraulic fluid for industrial hydraulic equipment

Product Type	ISO Grade	Document Type	Application
Mineral hydraulic oil	ISO 10	TDS	Industrial lubrication

Product Description

ORN SYN Hydraulic ISO 10 is a mineral-based hydraulic fluid developed for use in a wide range of hydraulic equipment. The formulation is designed to support wear protection, oxidation resistance, corrosion control, and foam suppression during operation.

Applications

- Hydraulic systems operating under high pressure, elevated temperatures, or variable operating speeds.
- Hydraulic equipment types including Vickers, Gerotor, Gresen, HPM, Denison, Cessna, Hydreco, and Worthington systems where the grade is specified.
- Workshop equipment, reduction gears, bearings, compressed air systems, and screw-type air compressors where compatible with the required viscosity and performance profile.

Key Features

- Helps protect against wear and oxidation.
- Supports foam control to maintain consistent hydraulic response.
- Provides viscosity stability for normal temperature variation during service.

Environmental Benefits

- Oxidation-resistant performance can help extend lubricant service life and reduce oil-change frequency.
- Anti-wear protection may help extend hydraulic component life, reducing maintenance waste and replacement part consumption.
- Foam control properties can support efficient hydraulic operation and help reduce fluid losses caused by aeration or overflow.
- Stable viscosity performance helps maintain consistent system operation.
- Suitable for collection through approved used-oil recovery or recycling routes where local regulations and facilities allow.
- Helps reduce avoidable contamination risks when stored, handled, and disposed of correctly.

Environmental Note

Used oil must be collected and disposed of responsibly. Do not discharge into drains, soil, surface water, or groundwater. Disposal should be carried out in accordance with local environmental regulations.

Performance Profile

Specifications

- AFNOR NF E 48-603 HM
- AGMA 9005-E02-RO
- DIN 51524 Part 2
- SAE MS1004
- DENISON HF-2
- EATON VICKERS I-286-S
- AFNOR NF E 48-690
- AIST 126, US Steel
- ISO 20763
- SEB 181222
- EATON E-FDGN-TB002-E
- EATON VICKERS M-2950-S
- AFNOR NF E 48-691
- AIST 127, US Steel
- JCMAS HK P041
- VICKERS I-286-S3
- EATON M-2950-S, 35VQ25 pump test
- GM LS2 AW hydraulic oil

Typical Properties

Property	Method	Unit	Typical Value
Density at 15°C	ASTM D4052	g/ml	0.836
Kinematic viscosity at 40°C	ASTM D445	mm ² /s	10.8
Kinematic viscosity at 100°C	ASTM D445	mm ² /s	2.82
Viscosity index	ASTM D2270	-	119
Pour point	ASTM D6892	°C	-33
Flash point COC	ASTM D92	°C	154

Typical Values

Typical characteristics are average values and should not be treated as fixed sales specifications.

Safety Precautions

Important

Read the latest Safety Data Sheet before handling or using the product. The information below is general handling guidance and does not replace the SDS.

Specifications

- Avoid prolonged or repeated contact with skin.
- Avoid contact with eyes.
- Do not ingest.
- Wash hands thoroughly after handling, especially before eating, drinking, or smoking.

Personal Protective Equipment

- Wear suitable protective gloves when handling the product.
- Use safety glasses or goggles where splashing may occur.
- Wear appropriate protective work clothing to reduce skin exposure.
- Use adequate ventilation if oil mist may be generated during operation.

Storage

- Store in the original, tightly closed container.
- Keep containers in a cool, dry, and well-ventilated area.
- Protect from direct sunlight, excessive heat, moisture, and contamination.
- Keep away from open flames, sparks, and other ignition sources.
- Prevent water, dust, dirt, or foreign materials from entering the container.

Spill Response

- Stop the leak if it is safe to do so.
- Contain spills immediately to prevent environmental contamination.
- Use sand, earth, or another suitable inert absorbent material to collect spilled product.
- Dispose of contaminated absorbent and recovered oil in accordance with local regulations.
- Clean affected surfaces thoroughly, as spilled oil may create a slip hazard.

Spill Response

- Skin contact: wash affected skin with soap and water.
- Eye contact: rinse carefully with clean water for several minutes. Seek medical advice if irritation continues.
- Inhalation: move to fresh air if exposed to oil mist or vapour.
- Ingestion: do not induce vomiting. Seek medical advice promptly.

General Note

Product characteristics may be updated as part of ongoing technical development. Users should confirm product suitability for the intended application and refer to the latest Safety Data Sheet for detailed health, safety, storage, transport, and disposal information.