NORDIC
ENGINEERED FOR EXCELLENCE

Technical Data Sheet

ORN SYN HYDRAULIC ISO 150
PN HYD150

Mineral-based hydraulic oil for demanding industrial lubrication applications

Product Type	ISO Grade	Document Type	Application
Mineral hydraulic oil	ISO 150	TDS	Industrial hydraulics

Product Description

ORN SYN Hydraulic ISO 150 is a mineral-based hydraulic oil formulated for industrial hydraulic systems and associated lubrication applications. The additive package is designed to support wear protection, oxidation resistance, corrosion control, and foam suppression during operation.

Applications

- Hydraulic equipment operating under elevated pressures, varied temperatures, and continuous-duty service.
- Systems associated with Vickers, Gerotor, Gresen, HPM, Denison, Cessna, Hydreco, and Worthington equipment where ISO VG 150 hydraulic oil is specified.
- Industrial reduction gears, workshop lubrication equipment, bearing lubrication systems, compressed air systems, and rotary screw air compressors where manufacturer requirements permit.

Key Features

- Helps protect hydraulic components and moving parts against wear.
- Supports resistance to oxidation and lubricant degradation during service.
- Controls foam to help maintain stable hydraulic operation.
- Maintains suitable viscosity characteristics for industrial hydraulic applications.
- Assists reliable system performance over extended operating periods.

Environmental Benefits

- Oxidation-resistant performance helps support longer lubricant service life under normal operating conditions, which may reduce oil-change frequency.
- Anti-wear protection may help extend hydraulic component life, reducing maintenance waste and replacement part usage.
- Foam control properties support stable hydraulic operation and may help reduce avoidable fluid losses.
- Suitable viscosity stability helps maintain consistent lubrication performance in demanding hydraulic applications.
- Used oil can be collected through approved waste-oil recovery or recycling routes where local regulations and facilities allow.
- Responsible storage, handling, and disposal help reduce the risk of soil, water, and drain contamination.

Environmental Note

Used oil must be handled responsibly. Do not discharge into drains, soil, surface water, or groundwater. Store used oil in suitable containers and dispose of it through authorised waste-oil collection or recycling services in accordance with local 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	0.890
Kinematic viscosity at 40°C	ASTM D445	mm^2/s	156
Kinematic viscosity at 100°C	ASTM D445	mm^2/s	14.9
Viscosity index	ASTM D2270	-	95
Pour point	ASTM D6892	°C	-24
Flash point COC	ASTM D92	°C	240

Typical Values
Typical characteristics are average results 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.

Handling

- Avoid prolonged or repeated skin contact.
- Avoid contact with eyes.
- Do not ingest.
- Wash hands thoroughly after handling, especially before eating, drinking, or smoking.
- Use only where the viscosity grade and performance profile are suitable for the equipment.

Personal Protective Equipment

- Wear suitable protective gloves when handling the product.
- Use safety glasses or goggles where splashing may occur.
- Wear protective work clothing to reduce skin exposure.
- Ensure 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 matter from entering the container.

Spill Response

- Stop the leak if 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.

First Aid Measures

- 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 performance characteristics may be updated as part of continuous product development and technical improvement programmes. Users should verify product suitability for the intended application and consult the latest Safety Data Sheet for detailed information on hazards, handling, storage, exposure controls, transport, first aid, and disposal.