



Product Data

Castrol Hyspin VSH 3000

Mineral Hydraulic Oil

Description

Castrol Hyspin™ VSH 3000 is a sophisticated mineral hydraulic oil incorporating the latest technology in anti-wear chemistry to impart improved resistance against premature wear.

The main feature of Hyspin VSH 3000 is the extreme shear stability of the viscosity index improver. This particular additive has proven its shear stability through extensive research and development work complemented by arduous field tests.

Application

Hyspin VSH 3000 can be used:

- Where very rapid speed of hydraulic response is imperative for production cycles at low start-up temperatures.
- Plant and equipment operating in extremely high ambient operating temperatures.

Market Applications

The main applications for mineral hydraulic oils are:

- Farm machinery
- Tractors
- Earthmoving equipment
- Fork lift trucks
- Machine tools
- Injection moulders
- Hydraulic presses
- Lifts, etc

However, in locations where a fluid spillage could result in a fire hazard, it is desirable that a fire resistant fluid be used.

Advantages

- Multigrade characteristics – rapid startup, high viscosity at working temperature. Equipment operates efficiently and effectively at all operating temperatures.
- Incorporates highly shear stable Viscosity Index improver – maintains fluid viscosity under severe operating conditions. Fluid performs as required throughout its service life.
- Incorporates latest anti-wear additive technology – minimizes equipment wear. Reduced replacement costs and down time.

Hyspin VSH 3000
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www.msds.castrol.com.au

Castrol Australia Pty Limited, Industrial Lubricants and Services, GPO Box 5222, Melbourne VIC 3001

Technical Advice Line 1300 557 998 / Customer Service 1300 554 890

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Manufacturers' Recommendations

Abex-Denison Division

Recommendations are for petroleum-based oil hydraulic fluids containing anti-wear additives. Hyspin VSH 3000 meets this requirement. The manufacturer's handbook should be consulted to obtain the viscosity range at the respective operating temperatures, together with a maximum viscosity at start-up. For piston pumps, non anti-wear oil (such as Hyspin VG series) are preferred.

Lucas

For hydraulic systems powered by Lucas Hydrostatic Transmission Pumps and fitted with silver plate bearing surfaces, certain precautions must be taken when selecting a hydraulic fluid. Castrol Magna LU is designed for use in Lucas pumps as the anti-wear additives included in Hyspin VSH 3000 will be deleterious to silver components.

With later model pumps, without the silver bearing surfaces, Hyspin VSH 3000 hydraulic oil is satisfactory.

Typical Characteristics

Test	Method	Typical Result
Density @ 15 ^o C	IP160	0.889
Kinematic Viscosity @ 40 ^o C	IP71	68 cSt
Kinematic Viscosity @ 100 ^o C	IP71	11 cSt
Viscosity Index	IP228	150
Demulsibility (max)	ASTM D1401	40-37-3 (30 minutes)
Copper Corrosion, 3 hours @ 100 ^o C	ASTM D130	1a
Rust Protection – distilled water	ASTM D665	No rust
Rust Protection – synthetic sea water	ASTM D665	No rust
Oxidation stability: hours to 2.0 mg KOH/g	ASTM D943	1800
Pour Point	IP15	-39 ^o C
Flash Point – Open	IP35	236 ^o C
Flash Point – closed	IP34	138 ^o C
Air Entrainment, 50 ^o C	DIN 51381/IP 313	4 minutes
Vickers Vane Pump	ASTM D2882	
- ring & vanes, mg, 100 hours		30 max
- ring & vanes, mg 250 hours		50 max
Total Acid Number, mg KOH/g	IP139	0.48

The above data is typical and does not constitute a specification

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Additional Information

Hyspin VSH 3000 is classified as not hazardous according to the criteria of NOHSC. In line with safe handling practices, it is recommended that the handling instructions outlined in the Castrol Material Safety Data Sheet be followed.

Hyspin VSH 3000 is classified as a Combustible C2 liquid for the purposes of storage and handling. Store in a cool, dry, well-ventilated area out of direct sunlight. Avoid sparks, flames, and other ignition sources. Store away from incompatible materials such as materials that support combustion (oxidizing materials). Reference should be made to Australian Standard AS1940 – The storage and handling of flammable and combustible liquids.

Spillage: **SMALL - 20 LITRES OR LESS**

Soak up on Castrol Diatomaceous Earth or similar inert oil absorbent. Arrange for disposal through an approved facility.

LARGE - GREATER THAN 20 LITRES

remove all sources of ignition. Increase ventilation. Evacuate all unnecessary personnel. Wear full protective equipment and clothing to minimise exposure. If possible contain the spill. Place inert absorbent material such as vermiculite, sand or dirt onto spillage. Use clean non-sparking tools to collect the material and place into a suitable labelled container. If large quantities of this material enter the waterways contact the Environmental Protection Authority, or your local Waste Management Authority.

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