



#### **Technical Data Sheet**

# HYDRAULIC H.V.S.

# Synthetic base hydraulic lubricant for systems subject to significant changes in temperature

Hydraulic Fluids synthetic technology to ensure high protection and performance that meet the widest range of hydraulic applications in the most diverse conditions of thermal stress. They have a strong resistance to thermal-oxidative degradation arising from environmental and operational variations in temperature, improving the protection against the formation of deposits which tend to decrease the efficiency of hydraulic power transfer systems.

### **Applications & Benefits**

#### - Low maintenance costs

Extended extended gear change compared to conventional hydraulics, as it has a higher resistance to thermal and chemical degradation. Minimizes squeegee formation, ensuring improved reliability and cleanliness of the hydraulic system.

#### - Advanced protection

Proven performance of additives reduces and prevents the wear and corrosive effects affecting the metal parts, making it usable in a wide range of operating conditions, including low loads and heavy loads.

#### - Thermal degradation resistance

The synthetic base mix with the additives allows the lubricant to withstand thermal and chemical degradation, thus reducing the formation of burrs.

#### - Demulsivity

Demulsive capacity to avoid formation of stable oil mixtures with water that may be accidentally present in the hydraulic circuits and hence obstructing the degradation of the oil.

#### - Foam performance

Easy release of absorbed air and limited foaming, thus avoiding the inappropriate operation of the power transmission device.

#### - Versatility

Hydraulic H.V.S. is recommended for use in a wide range of hydraulic applications in industrial and production environments, in mobile hydraulic applications such as excavators, cranes, and precision hydraulic systems that require excellent lubricant fluidity control at temperature variations, including applications where there are significant environmental and operational thermal excursions and marine applications where ISO HV fluids are required.

## **Specifications & Approvals**

- Exceeds the specifications listed below: Hydraulic Oil HYDRAULIC H.V.S. are classified ISO-L-HV according to ISO 6743-4

DIN 51524 - part III (Classe HVLP)
Cincinnati Lamb P69-P70
EATON-VICKERS M-2950-S
U.S. STEEL 127
DENISON HF1-HF2-HF0
AFNOR NFE 48-690/691
GM LH-03/ LH-04/LH-06
ASTM 6158-05 (HV)





Please remember to always check the owner's manual for the correct selection.

HYDRAULIC H.V.S. hydraulic fluids are compatible with all mineral-based lubricants, however, hydraulic fluids should never be mixed with others (such as biodegradable, flame retardant, etc.).

#### **Chemical-Physical Characteristics**

Test	Method	Hydraulic H.V.S.	
ISO Grade	-	46	68
Density @ 15°C, kg/dm <sup>3</sup>	ASTM D 4052	0.850	0.860
Viscosity cSt @ 40°C cSt @ 100°C	ASTM D 445	46.0 8.5	68.0 11.5
Viscosity Index - Unit	ASTM D 2270	160	160
Copper corrosion - 3h @ 100°C	ASTM D 130	1A	1A
Rust-preventing	ASTM D 665A	Exceeds	Exceeds
Pour point, °C	ASTM D 97	-39	-39
Flash point, °C	ASTM D 92	225	230
Demulsivity, minutes 40/40/0	ASTM D 1401	5	5
Foaming Trend / Stability	ASTM D 892	0/0	0/0
FZG / exceeded stage	DIN 51354	12	12

NOTE: The above values are "typical" for normal production tolerance and do NOT constitute a specification.

# Storage, Health & Environment

#### - Storage & Health

It is recommended to store the HYDRAULIC H.V.S. lubricant inside. If storage is carried out outdoors, it is recommended to position the drums, preferably under a roof, in a horizontal position and, if kept upright, cover them with a lid to prevent water infiltration. It is advisable not to store the packs at temperatures above 60°C or directly to the sun as it is good to keep them in places not subject to freezing.

HYDRAULIC H.V.S. does not have any health effects when properly used, applying the normal personal hygiene standards.

#### - Environment

Do not discharge the new and/or exhausted lubricant into the sewage system, soil or watercourses. Exhausted lubricant must be delivered to an authorized collection point.

<sup>\*</sup>For further information please contact the Technical Service.





# **Additional information**

# - Safety Data Sheet

It is provided aside and must be considered for its information or can be easily downloaded from <a href="www.rilub.it">www.rilub.it</a>
Contact your technical service for more information:



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