



1 SI-002-02 Hydraulic oil list

1.1 Standard oils

	CAUTION
	<p>Damage to the system due to incorrect oil</p> <ul style="list-style-type: none"> Hydraulic oils must meet the mentioned minimum requirements. For safety data for specific products contact your oil supplier.

	NOTICE
	This hydraulic oil list replaces all previous lists.

Properties: Viscotherm recommends standard hydraulic oils on the basis of mineral oil with properties against corrosion, oil aging and wear. In addition, they are characterized by low foaming tendency and good water/air separation.

Specification:

- HLP 68 (DIN 51524/2) / L-HM 68 (ISO 6743/4)
- FZG - damage force level > 11, (A/8,3/90) (DIN ISO 14635-1)

Viscosity: ISO VG 68 (68 mm²/s at 40°C)

Viscosity index: > 95 (DIN ISO 2909)


Compatibility: NBR (Nitril), FKM (Viton)


Product examples:

Manufacturer	Brand
EXXON-MOBIL	DTE 26
ENI-AGIP	OSO 68
CHEVRON-TEXACO	RANDO HD 68
BP-CASTROL	HYSPIN AWS 68
SHELL	TELLUS S2 M 68
CONOCO PHILLIPS	MEGAFLOW AW 68

(This lists some approved oils only. We reserve the right to change it)

1.2 Environmental friendly oils

	CAUTION
	<p>Damage to the system due to incorrect oil</p> <ul style="list-style-type: none"> • Environmental friendly hydraulic oil may contain not more than 2% mineral oil. • Environmental friendly hydraulic oils must meet the mentioned minimum requirements. • For safety data for specific products contact your oil supplier.

	NOTICE
	This hydraulic oil list replaces all previous lists.

Properties: Viscotherm recommends environmental friendly hydraulic oils that are bio-degradable and based upon synthetic esters with properties against corrosion, oil aging and wear. In addition, they are characterized by low foaming tendency and good water/air separation.

Specification: Ester HEES (ISO 15380) / (ISO 6743/4)
FZG - damage force level > 11, (A/8,3/90) (DIN ISO 14635-1)

Viscosity: ISO VG 68 (68 mm²/s at 40°C)

Viscosity-index: > 140 (DIN ISO 2909)

Bio-degradability: > 60 % (OECD 301 B)


Compatibility: NBR (Nitril) , FKM (Viton)


Product examples:

Manufacturer	Brand
BECHEM	HYDROSTAR HEES 68 EEL
PANOLIN	HLP SYNTH 68
BP-CASTROL	Carelube SES 68
FUCHS	Plantohyd 68 S
SHELL	Naturelle HF-E-68

(This lists some approved oils only. We reserve the right to change it)

1.3 Food grade oils

	CAUTION
	Damage to the system due to incorrect oil <ul style="list-style-type: none"> • Food grade hydraulic oils must meet the mentioned minimum requirements. • For safety data for specific products contact your oil supplier.

	NOTICE
	This hydraulic oil list replaces all previous lists.

Properties: Viscotherm recommends synthetic food grade hydraulic oils which are odourless and taste-neutral. The oil has properties against corrosion, oil aging and wear. In addition, they are characterized by low foaming tendency and good water/air separation.

Specification:

- HLP 68 (DIN 51524/2) / L-HM 68 (ISO 6743/4)
- FZG - damage force level > 11, (A/8,3/90) (DIN ISO 14635-1)

Viscosity: ISO VG 68 (68 mm²/s at 40°C)

Viscosity index: > 95 (DIN ISO 2909)

Compatibility: NBR (Nitril), FKM (Viton)

Registration: NSF H1

Product examples:

Manufacturer	Brand
PANOLIN	Orcon HYD 68
BECHEM	Berусynth 68 H1
EXXON-MOBIL	SHC CIBUS 68
	MOBIL EAL ENVIROSYN 68H
CITGO-CLARION	Foodmachinery A/W 68
BP-CASTROL	Optileb HY 68
HITECRUN Shanghai	HITECSYN SHL-FG68
KLUBER	Klüberfood 4 NH1-68
FUCHS	Cassida HF68

(This lists some approved oils only. We reserve the right to change it)