

HYDRO S

ZINC-FREE HYDRAULIC FLUID
ISO GRADE HM

220017-220018-220019-220020-220021/04.19

Rev. 3

DESCRIPTION & APPLICATIONS

HYDRO S is suitable for all hydraulic systems requiring a zinc free fluid, including vane, screw or gear pumps and operating up to 350 bar. HYDRO S can also be used for lubrication of moderately loaded spur gears

HYDRO S is a fluid which meets the specifications of the manufacturer NETSTAL, which requires zinc free oil, ISO grade 68, for the lubrication of its injecting moulding machines.

HYDRO S meets the specifications of manufacturer of injection moulding machines ENGEL in grade 46.

- Due to the exceptional filterability HYDRO S keeps filterable, even contamination with water. Only the impurities are filtered out (no loss of additives).
- High resistance to oxidation benefits a long-life quality of the operating fluid at full length of its use.
- The low pour point enables to lower the using temperature threshold
- Seal compatible.

PERFORMANCES

Satisfies to the following specifications:

CINCINNATI

P68(ISO32)/P69(ISO68)/P70(ISO46)DENISON

HF0

DIN 51524 Teil 2 HLP

ENGEL Presses (grade

46)ISO 6743 HM

LVD ISO (grades 46 and

68) NETSTAL Presses

(grade 68)NFE 48600 HM

NFE 60200 HM

HYDRO S

ENVIRONMENT, HEALTH & SAFETY

Please consult also the Safety Data Sheet about how to manipulate and to stock the product as well as to learn about the first aid measurements in case of accident.

Elimination after use must be made in conformity with the local rules in force about used oils disposal. When needed, Safety Data Sheet can be obtained upon request.

Conservation of the product: 3 year(s) in closed container and sheltered.

PROPERTIES

CHARACTERISTICS	UNITS	METHODS	TYPICAL DATA				
			15	22	32	46	68
ISO VG	-	-	15	22	32	46	68
Specific gravity at 15°C	kg/m ³	NFT 60101	852	859	873	879	880
Kinematic viscosity at 40°C	mm ² /s (cSt)	NFT 60100	15,3	21,6	31	45,6	68,1
Kinematic viscosity at 100°C	mm ² /s (cSt)	NFT 60100	3,7	4,3	5,4	6,8	8,6
Viscosity index	-	NFT 60136	132	105	108	103	97
Copper corrosion	-	ASTM D 130	1a	1a	1a	1a	1a
Flash point	°C	NFT 60118	182	208	223	242	240
Pour point	°C	NFT 60105	-30	-27	-27	-24	-24
TAN (TotalAcid Number)	mg KOH/g	ASTM D 664	0,27	0,21	0,20	0,24	0,26
Product number	-	-	220017	220018	220019	220020	220021

The average values are given for information only.