



HELEN

INDUSTRY

Description

These paraffin and synthetic based mineral oils are designed for the lubrication of steam-powered machine cylinders. They are capable of continuously maintaining an exceptionally stable lubricating film between contact metallic parts, as well as preventing steam from escaping, whether through valves, pistons or gaskets.

Recommended uses

- They are used, according to an increasing order of viscosity, for saturated, reheated steam or steam with a high degree of reheating
- Valid for general greasing, gears which are not highly charged and other mechanical elements in which high temperature conditions may occur.
- They may be used as heat transfer fluids when used in thermal circuits exposed to the open air.

Properties

- Excellent oiliness.
- High ignition point.
- Minimum losses due to volatility.
- Low carbon residue.

Quality level

- DIN 51510 – ZA (Grade 200) and ZB (Grade 240)
- ISO 6743/12 – Q
- ISO 6743/6 – CKB

Technical characteristics

	UNIT	METHOD	VALUE	VALUE	VALUE
Commercial name			140	200	240
Commercial name			460	680	1000
Viscosity at 100°C	cSt	ASTM D 445	30.5	40.0	50.5
Viscosity at 40°C	cSt	ASTM D 445	460	680	1000
Viscosity index		ASTM D 2270	95	95	95
Density @ 15°C	g/cm ³	ASTM D 4052	0.906	0.908	0.908
Flash point, open cup	°C	ASTM D 92	265	265	270
Freezing point	°C	ASTM D 97	-9	-9	-9
TAN	mg KOH/g	ASTM D 664	0.2	0.2	0.2
Corrosiveness to copper 3h at 100°C		ASTM D 130	1b	1b	1b

Available in

Helen 140: Bulk and 185 kg drums.
Helen 200: Bulk
Helen 240: 185 kg drums.

■ Hazard identification

This product is not classified as toxic or hazardous under current legislation.

■ Handling

Minimum precautions should be taken to avoid prolonged contact with the skin. The use of gloves, visors or glasses is recommended to avoid splashes.

■ Health and Safety Hazards

Inhalation: Given that it is not a particularly volatile product, the risk of inhalation is minimal.

Ingestion: Do not induce vomiting. Provide water. Seek medical advice.

Contact with the skin: Wash with plenty of water and soap.

Eyes: Wash thoroughly with water.

General measures: Seek medical advice.

■ Fire-fighting measures

No special measures required.

Fire-extinguishing measures: Foams, dry chemicals, CO₂, water spray. Do not apply the jet of water directly as this could cause the product to disperse.

■ Environmental precautions

Danger of physical pollution if spilt (water, coastlines, soil, etc.) due to its floatability and oily consistency that may harm flora and fauna on contact. Avoid material getting into water outlets.

Decontamination and cleaning: Treat like an accidental oil spill. Prevent dispersion using mechanical barriers and remove by physical or chemical means.

A safety information file is available on request.

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Unless otherwise indicated, the figures cited in technical characteristics should be considered typical.