

# SRS Leichtlauf-Motorenöl O-1178



Low Friction Engine Oil

February 2020

## Characteristics

**SRS Leichtlauf-Motorenöl O-1178** is a multi-grade engine oil for gasoline and diesel combustion engines in land and sea vehicles and stationary systems based on synthetic technology and accurately adapted additives. Excellent lubrication at all temperatures and exceptional wear protection under all operating conditions are outstanding properties of SRS Leichtlauf-Motorenöl O-1178.

## Application

**SRS Leichtlauf-Motorenöl O-1178** corresponds to a STOU (Super Tractor Oil Universal) with gear oil and ATF properties and is suitable for the lubrication of all types of internal combustion engines, especially 4-stroke diesel engines in motor vehicles, sea vehicles, pioneer and troop devices, unless the use of other oils is required.

SRS Leichtlauf-Motorenöl O-1178 is intended as an internal combustion engine oil for use in ambient temperature ranges from -46°C to +35°C. It corresponds to the SAE viscosity class 0W-30. As an ATF or gear oil, it can be used at an ambient temperature of -45°C to +50°C. When using SRS Leichtlauf-Motorenöl O-1178 in gearboxes, torque converters, retarders or flow couplings, a continuous temperature of +150°C (short term max. 1 hour to +170°C) can be tolerated without restrictions. At long-term use temperatures of +150°C to +170°C, the specified oil change intervals must be halved. This tolerance to high temperatures is a significant advantage over other GL 3 / GL 4 gear oils. SRS Leichtlauf-Motorenöl O-1178 is also suitable for use in hydraulic systems, converters and clutches, as well as manual and steering gears for wheeled and tracked vehicles, as far as they are prescribed in the TDv (technical service regulations) for these devices. SRS Leichtlauf-Motorenöl O-1178 is not suitable for use in engines with a diesel particle filter (DPF).

**SRS Leichtlauf-Motorenöl O-1178** is approved by the German Army against specification TL 9150-0080/4 with the qualification certificate B-0443.

## Specifications

- SAE Grade 0W-30
- API CF-4/SF
- NATO-Kode O-1178
- Bw-Kode OY1175

## Approvals

- Bundeswehr: TL 9150 – 0080/4

## Recommendations

- ZF TE-ML 13

SRS Leichtlauf-Motorenöl O-1178 is a product of the H&R ChemPharm GmbH.

Typical Data	Test Method	SRS Leichtlauf-Motorenöl O-1178
SAE-Grade	SAE J 300	0W-30
Density at 15°C	DIN 51 757	0.860
Dyn. Viscosity at -35°C (CCS)	ASTM D 5293	6,130
Kin. Viscosity at 40°C	DIN EN ISO 3104	51.9
Kin. Viscosity at 100°C	DIN EN ISO 3104	10.7
Viscosity Index (VI)	DIN ISO 2909	198
Flash Point COC	DIN ISO 2592	230
Pour Point	DIN ISO 3016	<-49
Total Base Number	ASTM D 2896	11.3

The above values may vary within the commercial limits.

Made in Germany

