



**Product Name:** RÄDER 20W50 SP MA2

**Application:** Motorcycle 4T engine

**JASO, API Service:** MA2 , SP

**Viscosity Grade:** 20W50

**Quality:** Fully synthetic

**Recommended for:** Motorcycles 4-stroke engine with exhaust after-treatment systems such as catalytic converters or secondary air injection.

**Drain Interval:** Up to 16,000 km

## Product Overview

RÄDER 20W50 SP MA2 is a fully synthetic motor oil designed for high-performance motorcycles. It offers superior engine protection, reliability, and performance for on-road and off-road riding. This advanced formula is suitable for 4-stroke engines with or without integrated gearboxes, and both wet and dry clutches. It meets the stringent requirements of modern engines equipped with catalytic converters and exhaust after-treatment systems.

## Application

- High-performance motorcycles used in sport, adventure, or touring.
- Severe conditions, including high-temperature environments and demanding riding styles.
- Applications such as ATVs, UTVs, personal watercraft (PWC), and snowmobiles (when manufacturer's viscosity recommendations match).

## Performance Benefits

- Exceptional oil film strength for high-temperature, high-speed conditions.
- Outstanding engine cleanliness and deposit control.
- Enhanced clutch grip and smooth shifting for optimal riding performance.
- Improved oxidative stability and low evaporation loss.
- Guaranteed compatibility with catalytic converters and wet clutches.

## Performance Standards:

- API SP , API SN plus , API SN , API SL ,
- JASO MA2 (2023)

## Typical Properties

Property	Method	Typical Value
SAE Viscosity Grade	SAE J300	20W-50
Density @ 15°C	DIN 51757	0.8564 g/cm <sup>3</sup>
Viscosity @ 40°C	ASTM D445	124.7 mm <sup>2</sup> /s
Viscosity @ 100°C	ASTM D445	18.11 mm <sup>2</sup> /s





Viscosity Index	DIN ISO 2909	162
HTHS Viscosity @ 150°C	ASTM D4741	4.8 mPa.s
Pour Point	DIN ISO 3016	-33 °C
Flash Point	DIN ISO 2592	240 °C
Evaporation Loss (Noack)	ASTM D5800	7.95%
Total Base Number (TBN)	DIN ISO 3771	8.50 mg KOH/g
Sulfated Ash	DIN 51575	0.75 %

## PROPERTIES

- Outstanding oil film resistance at extreme conditions.
- Reliable lubrication for smooth clutch engagement and gear shifting.
- Prevents black sludge formation and reduces wear.
- Excellent shear stability and aging resistance.
- Compatible with all commercially available motor oils.

## Handling and Safety

- Avoid prolonged or repeated contact with skin.
- Use protective gloves and eyewear during handling.
- Dispose of used oil in compliance with local regulations.

## Storage Instructions

- Store in a cool, dry place away from sunlight and heat sources.
- Ensure containers are tightly sealed to prevent contamination

