# Engine Oil for Motorcycles



Catalogue





# MXRACTION SERIES

### **INDEX**

INTRODUCTION	4
MOTORCYCLE OILS BASICS	5
THE FRICTION EQUATION	6
NEW FORMULA	7
MXR ACTION SERIES PRODUCT LINE UP	8
FULLY SYNTHETIC	0
MXR PLATINUM 10W-40 MXR MATIC PLATINUM 10W-30	9
MXR MATIC PLATINUM 10W-40	9
SEMI SYNTHETIC	
MXR PLUS 10W-40	10
MINERAL	
MXR 7 10W-40	11
MXR 7 15W-40	11
MXR 5 15W-40	12
MXR 5 20W-40	12
MXR 5 20W-50	12
MXR MATIC 10W-30	13
MXR MATIC 10W-40	13
MXR MATIC 20W-40 MXR 3 15W-40	13 14
MXR 3 20W-50	14
MXR 3 SAE 40	14
MXR 2T	15
Find the best lubricant for your motorcycle	15

#### INTRODUCTION

When you choose Repsol Lubricants, you get so much more. Because in addition to a product of the highest quality, you also get the Repsol guarantee: an integrated global energy company which carries out exploration, production, refining, distribution and marketing activities in more than 90 countries. It provides millions of people and companies all over the world with the most efficient, responsible and innovative energy solutions.

You also choose maximum innovation. Because Repsol has a Technology Centre at the global forefront of R&D&i, where our technicians and researchers are continuously improving each product to ensure maximum efficiency and the highest level of technical and environmental quality.

In line with our philosophy of innovating and improving every day, we are pleased to present our catalogue of Lubricants for motorcycles.

#### **MAXIMUM QUALITY**

Repsol Lubricants surpass the most important sector standards and norms. Our products have been tested in competition to guarantee their maximum efficiency.

Our philosophy is to innovate in order to move forward. We have therefore improved our range of products to offer greater protection for the most demanding engines in the market.

Our lubricants improve the durability of engines and exhaust gas after-treatment systems, complying with sector regulations. They also guarantee fuel economy and reduce CO2 emissions in the most advanced engines.

At Repsol we select the best refining processes in the manufacture of our own lubricant base oils. Combined with the use of the highest-quality additives, this offers you products with specific formulations for each manufacturer that take care of your engine and give you the extra confidence you need.

Furthermore, we have expanded the product range to meet all possible needs, offering riders lubricants which have been approved and recognized by all motorcycle manufacturers.

#### **NEW ACTION SERIES**

New product range, specially formulated to offer maximum value, with formulas specifically adapted to high temperature climates for SEA countries. New streamlined range architecture, for an easier lubricant selection.

Choose the ideal product according to your needs:

**MXR Platinum:** Fully synthetic motorcycle oil meeting the latest API standards and JASO MA2 qualification. Designed for maximum durability, cleanliness, wear protection, and optimum gear shifting.

**MXR Matic Pt:** Fully Synthetic engine oil with Matic Cooling Tech. Durable formula optimized to reduce friction, allowing the engine to run cooler, and allowing for maximum power output.

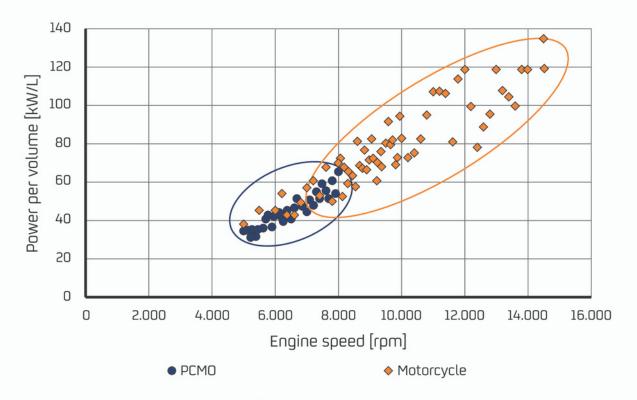
**MXR Plus:** Semi Synthetic Motorcycle oil designed with engine protection and cleanliness, and optimum gear shifting as the main goal.

MXR Matic: Mineral based engine oil with Matic Cooling Tech. Designed to reduce friction, allowing the engine to run cooler.

MXR 7, 5, 3: Mineral based motorcycle oils specially formulated for a wide range of motorcycles. Some with higher viscosities to suit older engines.

#### MOTORCYCLE OILS BASICS

Compared to car engines, motorcycle engines run under more severe conditions, putting the oil into a more challenging lubrication environment. Lubricating film strength is the key to avoid metal rubbing against metal.



\*Adapted from the Specification Table, JSAE, 1994

Oil sump volumes of MCO are 3-4 times smaller than a normal car oil sump. Enhanced antioxidant feature is required to reach desired drain oil intervals without performance depletion.

Less efficient cooling system (Forced cooling system in PCMO vs air/water cooling system in MCO), means higher temperatures into the lubrication system. Very low evaporation losses in the oil will guarantee the right viscosity along its use.

For wet clutch motorcycles, the same oil has to lubricate the engine, clutch and transmission. This requires a wider set of features, in order for the oil to reach the right performance in all the lubricated parts. A lubricant with JASO MA2 qualification will generate enough friction hinder clutch slipping.

Automatic scooters, on the other hand, keep the engine and the transmission systems separate and specific oils can be used for each one. In this case, lubricants meeting JASO MB can be used. These lubricants are tuned for lower friction, which allows to reduce the oil consumption, and achieve lower operating temperatures in the engine.

#### THE FRICTION EQUATION

#### Wet clutch motorcycles:

Motorcycles with wet clutch use the lubricant for both engine, clutch and transmission. This creates a complication since, what works best in the engine (lower friction), would cause the clutch to slip, making the gear shifting unreliable.

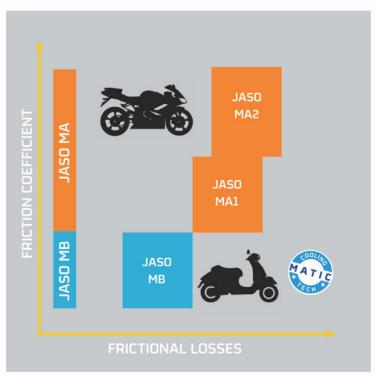
To counter this, lubricants for motorcycles with wet clutch are designed with higher friction in mind. The JASO standards regulate this property, and act as reference for all the industry.

Action series lubricants, from MXR 5 and above, all meet JASO MA2, which means the gear shifting will be fast and responsive, even when high torque is required.

#### **Matic Cooling Tech**

Motorycles with dry clutch (mostly scooters), use continuously variable transmissions (CVT) that are housed separately from the engine. Hence, two different lubricants are used for the engine and the gearbox. This means the gear oil will be optimized to achieve the best CVT performance, and the engine oil can be optimized for lower friction. Reducing frictional losses leads to lower operating temperatures in the engine, and higher fuel efficiency.

All Repsol Action series MXR MATIC products come equipped with Matic Cooling Tech, and are the best option for your engine if you have a motorcycle with dry clutch. Use with motorcycle with wet clutch will result in poor performance, though. Always consult your motorcycle'ss maintenance manual before choosing the lubricant.



- Higher friction coefficient is needed to guarantee good clutch engagement. The more powerful the motorcycle, the higher the friction coefficient should be. Most motorcycles require JASO MA2, which covers the most demanding applications.
- JASO MA or MA1 is usually recommended for motorcycles with smaller cc. Check, the mlotorcycle maintenance manual to make sure which is the best motorcycle oil for your bike.
- JASO MB is suitable for motorcycles that have a separate lubrication circuit for gear/clutch and for the engine. The engine oil can be optimized for lower friction. Repsol lubricants come with Matic Cooling Tech, that allows the engine to run cooler and save fuel.

#### **NEW FORMULA**

All Action series engine oils are designed with:



By formulating our products using carefully selected chemicals and **hydrotreated** base oils, we optimize the lubricant's performance in 3 key areas:

Wear protection: XR Tech is a reinforced anti wear chemistry, designed to reduce the wear in all the critical areas in the engine. A protective oil film is generated between metal parts to prevent rubbing, thus improving performance and reducing the metallic wear under different engine operating conditions. Up to 30% less wear in cylinder liner found in Mack T-10 bench test.

**Engine Cleanliness**: XR Tech uses dispersant additives that keep soot particles in suspension and control sludge build-up, thus preventing blockage in engine parts with tighter tolerances. This way, it manages to enhance the performance of the oil during the drain interval, effectively extending the lubricant's life so it can protect the engine better and for a longer time.

Oil durability: XR Tech makes use of highly refined base oils combined with carefully selected additives, which results in lubricants with improved oxidation control. An engine oil more resistant to oxidation maintains its properties for a longer time, and thus is able to ensure optimum protection during the whole drain interval.



#### PRODUCT LINE UP







		Viscosity	API	JASO
MXR PLATINUM	FULLY SYNTHETIC	10W-40	SN	MA2
MXR MATIC PLATINUM		10W-30	SN	MB
		10W-40	SN	MB
MXR PLUS	SEMI SYNTHETIC	10W-40	SN	MA2
MXR 7	MINERAL	10W-40	SN	MA2
		15W-40	SN	MA2
MXR 5		15W-40	SL	MA2
		20W-40	SL	MA2
		20W-50	SL	MA2
MXR MATIC		10W-30	SL	МВ
		10W-40	SL	МВ
		20W-40	SL	МВ
MXR 3		40	SG	MA
		15W-40	SG	MA
		20W-50	SG	MA
MXR 2T			TC,TB	FB

# MXR PLATINUM 10W-40

#### **FULLY SYNTHETIC**

API SN / JASO MA2

Repsol MXR Platinum is a top tier, fully synthetic motorcycle oil. It provides maximum protection to the engine, gears and clutch, while ensuring optimum clutch performance. The fully synthetic base oils make this lubricant more resistant to oxidation extending its service life, while the carefully selected additives give the engine the ultimate boost.



# MXR MATIC Pt 10W-30

#### **FULLY SYNTHETIC**

API SN / JASO MB

Repsol MXR Matic Platinum is a ultra high quality engine oil for high performance 4T engines. It contains special additives that improve lubricity and maintain a low friction coefficient. These additives are also in accordance to the quality standards of JASO MB. It is recommended for use in motorcycles that require a low-friction lubricant. JASO MB is recommended especially for dry-clutch scooters and automatic-transmission motorcycles.



# MXR MATIC Pt 10W-40

#### **FULLY SYNTHETIC**

API SN / JASO MB

Repsol MXR Matic Platinum is a ultra high quality engine oil for high performance 4T engines. It contains special additives that improve lubricity and maintain a low friction coefficient. These additives are also in accordance to the quality standards of JASO MB. It is recommended for use in motorcycles that require a low-friction lubricant. JASO MB is recommended especially for dry-clutch scooters and automatic-transmission motorcycles.



# **MXR PLUS 10W-40**

#### **SEMI SYNTHETIC**

API SN / JASO MA2

Repsol MXR Plus is the most suitable semi synthetic lubricant oil for modern 4-stroke engines. It provides maximum protection for medium and high cylinder capacity engines with one, two, three or four cylinders, and ensures the care of all its components and the proper lubrication of wet clutches. It is widely regarded as a lubricant that boosts the throttle response.





# MXR 7 10W-40

#### MINERAL

API SN / JASO MA2

Repsol MXR 7 is a top tier multigrade lubricant oil suitable for modern 4-stroke engines. Its carefully selected additives offer ultimate performance, giving this product a competitive edge over similarly specced products. The lubricant has excellent wear protection for medium to high cylinder capacity engines. It provides outstanding protection for the gear and wet clutch, and ensures optimum clutch response and quick gear shifting. On top of this, oil consumption with this lubricant will be very low, allowing for continued usage with no need to top up.



# MXR 7 15W-40

#### **MINERAL**

SAM OSAL / NS IGA

Repsol MXR 7 is a top tier multigrade lubricant oil suitable for modern 4-stroke engines. Its carefully selected additives offer ultimate performance, giving this product a competitive edge over similarly specced products. The lubricant has excellent wear protection for medium to high cylinder capacity engines. It provides outstanding protection for the gear and wet clutch, and ensures optimum clutch response and quick gear shifting. On top of this, oil consumption with this lubricant will be very low, allowing for continued usage with no need to top up.





# MXR 5 15W-40

#### MINERAL

API SL / JASO MA

Repsol MXR 5 is a lubricant oil suitable for low, medium and high cylinder capacity 4-stroke engines. Due to its special composition, Repsol Moto Rider is particularly apt for riding long distances without performance loss or premature wear of different engine components. Furthermore, given the oil's special viscosity, it is ideal for making long journeys, as motorists do not have to monitor constantly consumption levels. Its frictional properties also ensure smooth gear shifting.



# MXR 5 20W-40

#### **MINERAL**

API SL / JASO MA

Repsol MXR 5 is a lubricant oil suitable for low, medium and high cylinder capacity 4-stroke engines. Due to its special composition, Repsol Moto Rider is particularly apt for riding long distances without performance loss or premature wear of different engine components. Furthermore, given the oil's special viscosity, it is ideal for making long journeys, as motorists do not have to monitor constantly consumption levels. Its frictional properties also ensure smooth gear shifting.



# MXR 5 20W-50

#### **MINERAL**

API SL / JASO MA

Repsol MXR 5 is a lubricant oil suitable for low, medium and high cylinder capacity 4-stroke engines. Due to its special composition, Repsol Moto Rider is particularly apt for riding long distances without performance loss or premature wear of different engine components. Furthermore, given the oil's special viscosity, it is ideal for making long journeys, as motorists do not have to monitor constantly consumption levels. Its frictional properties also ensure smooth gear shifting.



# MXR MATIC 10W-30

#### MINERAL

API SL / JASO MB

Repsol MXR Matic is a lubricant for four-stroke engines, developed to meet the requirements of the most important motorcycle manufacturers. For use in automatic scooters only, this product is equipped with friction modifiers that allows it to protect the engine while reducing friction and fuel consumption. Lower friction also means a more optimal power output and a more agile engine as a result.



# MXR MATIC 10W-40

#### **MINERAL**

API SG / JASO MA

Repsol MXR Matic is a lubricant for four-stroke engines, developed to meet the requirements of the most important motorcycle manufacturers. For use in automatic scooters only, this product is equipped with friction modifiers that allows it to protect the engine while reducing friction and fuel consumption. Lower friction also means a more optimal power output and a more agile engine as a result.



# MXR MATIC 20W-40

#### **MINERAL**

API SL / JASO MB

Repsol MXR Matic is a lubricant for four-stroke engines, developed to meet the requirements of the most important motorcycle manufacturers. For use in automatic scooters only, this product is equipped with friction modifiers that allows it to protect the engine while reducing friction and fuel consumption. Lower friction also means a more optimal power output and a more agile engine as a result.



# MXR 3 15W-40

#### **MINERAL**

API SG / JASO MA

Repsol MXR 3 is a mineral grade lubricant oil for 4-stroke engines. It is designed as a general use oil to protect hard working, high mileage engines against wear. It is specially formulated for demanding riding conditions. Its viscosity allows for optimal lubricity in the harshest environments and an outstanding sealing effect in the combustion chamber to maximize power output. Especially ideal for high temperature climate. It is also has exceptionally low oil consumption. Its frictional properties guarantee smooth gear shifting.



# MXR 3 20W-50

#### **MINERAL**

API SG / JASO MA

Repsol MXR 3 is a mineral grade lubricant oil for 4-stroke engines. It is designed as a general use oil to protect hard working, high mileage engines against wear. It is specially formulated for demanding riding conditions. Its viscosity allows for optimal lubricity in the harshest environments and an outstanding sealing effect in the combustion chamber to maximize power output. Especially ideal for high temperature climate. It is also has exceptionally low oil consumption. Its frictional properties guarantee smooth gear shifting.



# **MXR 3 SAE 40**

#### **MINERAL**

API SG / JASO MA

Repsol MXR 3 is a mineral grade lubricant oil for 4-stroke engines. It is designed as a general use oil to protect hard working, high mileage engines against wear. It is specially formulated for demanding riding conditions. Its viscosity allows for optimal lubricity in the harshest environments and an outstanding sealing effect in the combustion chamber to maximize power output. Especially ideal for high temperature climate. It is also has exceptionally low oil consumption. Its frictional properties guarantee smooth gear shifting.



# MXR 2T

#### **MINERAL**

APITC, TB / JASO FB

Repsol MXR 2T is a lubricant oil suitable for general usage in 2-stroke engines. Apt for a wide range of motorcycles, this product is mainly recommended for urban use. A clean oil protects the engine and prevents ring sticking while keeping exhaust vents clean and reduces smoke emission. Additionally, it supports very high temperature operating conditions, prevalent during intensive usage due to city traffic. It also supports weight-bearing activities such as the carrying of passengers on a scooter or a small cylinder capacity motorcycle.



# Find the best lubricant for your motorcycle!

Use the **REPSOL LUBRICANT SEARCH ENGINE** and the perfect lubricant for your vehicle.

You can search by **brand**, **model**, or **version**.





