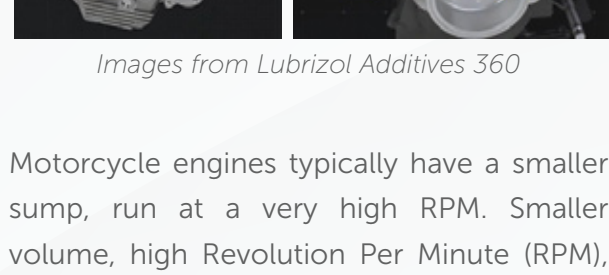


Understanding PETRONAS Sprinta

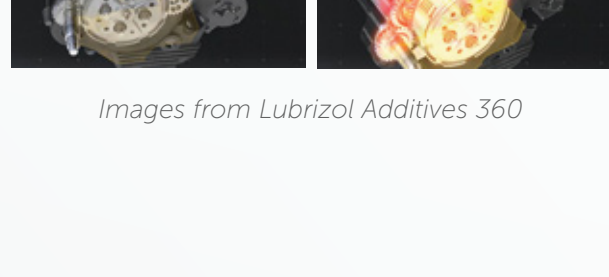
Motorcycle Engine

Internal Combustion engines consist of approximately more than 400 parts, if movement operation left unprotected can severely damage and reduce the lifetime of the parts. A petrol-powered engine moving incredibly fast and subject to the wide range of temperature operation and, even as high as 800 degree celcius especially during the combustion process.



Images from Lubrizol Additives 360

Motorcycle engines typically have a smaller sump, run at a very high RPM. Smaller volume, high Revolution Per Minute (RPM), high temperature significantly put more strain on the oil. Apart from this, the cooling system for the motorcycle is still air-cooled type, and this causes the engine to run three times hotter than the water-cooled engine.



Images from Lubrizol Additives 360

Motorcycle Oil

Lubricants used to reduce wear and tear caused by friction and are also used to clean, cool, and transfer the energy for a specific application. The difference between lubricant for cars and motorcycle, motorcycle oil used to lubricate engine, clutch, and gear in our reservoir or compartment. In contrast, car engine oil used to lubricate the engine; the gear and clutch separately lubricated.

Hence, motorcycle oil has to deal with a very harsh environment; significant change of gears increases heat and causes shear to the oil, increase stress whenever clutch engage and disengage. Motorcycle engine oil also does not contain the friction modifiers of a passenger car engine oil. Because of these factors, the formulation of the motorcycle engine oil is unique, produced from specific viscosity and additives.

Product Insight

Motorcycle oil needs to react instantly to the rapidly-changing road and riding conditions – enabling all of the bike’s critical parts and enabling them to perform responsively from a cold start, in traffic and out on the open road.

Challenges

The demands are unpredictable. There is nothing routine about navigating life on two wheels, and the ever-changing conditions create a dynamic chain reaction from rider to bike to oil that needs always managing to avoid any harmful consequences.

Solution

PETRONAS Sprinta with UltraFlex™ technology engineered to come alive – reacting instantly to flex to the different demands of all your bike’s critical areas, flowing smoothly to deliver instant defense and responsive performance so that you can get ahead.

Ultraflex™ Technology



1

PETRONAS Sprinta with UltraFlex™ activates instantly – flowing smoothly and consistently to lubricate the engine, surging to the clutch to create a grip that prevents slipping and maintains power, and reaching the gears to deliver responsive shifting.

2

PETRONAS Sprinta with UltraFlex™ instantly delivers outstanding deposit and viscosity control to resist stress and heat – protecting moving parts against wear to keep maintenance bills down and your bike out on the road, where it belongs.

3

PETRONAS Sprinta with UltraFlex™ has a formulation that meets the latest global environmental standards. We’re committed to sustainable mobility, investing in innovative R&T projects to improve air quality for riders all over the world.

Specifications

API Rating

The American Petroleum Institute (API) is the organization that provides the standard specification for the automobile engine oil base on two categories, that is petrol and diesel.

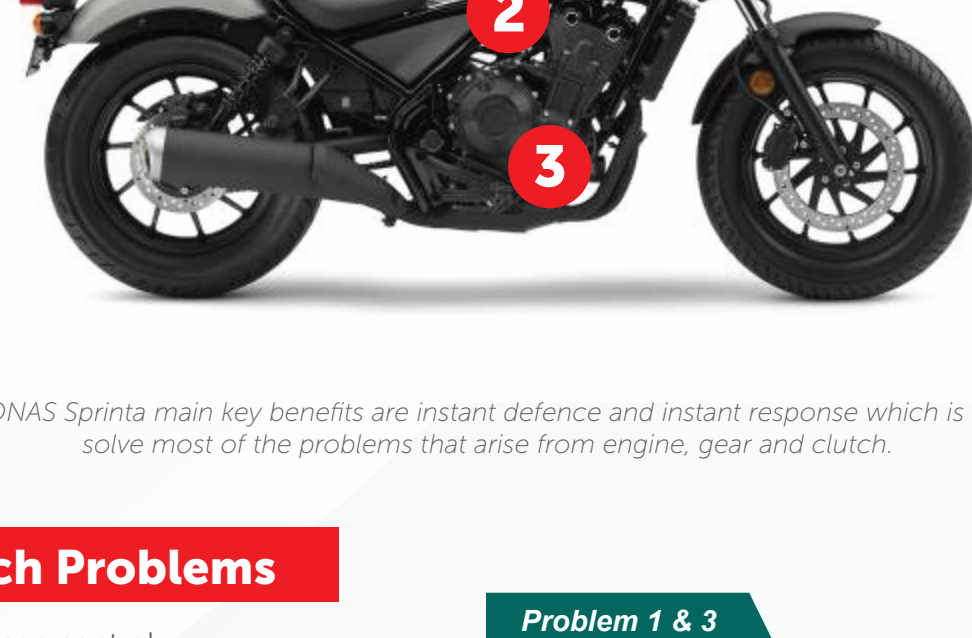
Higher performance engine oils such as API SJ through SM will contain some level of friction modifier. While the friction modifier improves fuel economy, it is not compatible with wet clutches used on motorcycles. The friction modifier causes the wet clutch to slip. This is especially true if the motorcycle manufacturer recommends using only engine oils carrying API SF or SG Service Categories.

JASO Rating

JASO MA is a four-stroke motorcycle engine oil specifications, the standard introduced by The Japanese Automotive Standards Organization (JASO) in 1998. The JASO MA developed specifically compatible with major Japanese OEMs such as Honda, Yamaha, Kawasaki, and Suzuki. Most non-Japanese motorcycle manufacturers (Aprilia, BMW, Ducati, Triumph, etc.) now also specify a JASO standard for use in their motorcycle engines.

JASO only has two standards for four-stroke engines at this time: JASO MA (higher friction oils) and JASO MB (low friction oils). The JASO specifications include HTHS Viscosity requirements, sulfated ash content, and several other essential characteristics that are not specified or are not as rigidly determined by the API specifications.

PETRONAS F900 meets with the highest and latest specification of JASO MA2 or MA and API SN. It is suitable for motorcycles manufactured by leading Japanese, European and American manufacturers



PETRONAS Sprinta main key benefits are instant defence and instant response which is able to solve most of the problems that arise from engine, gear and clutch.

1. Clutch Problems

- Clutch slippage control
- Clutch not smoothly engage or disengage causing uncomfortable riding
- Resist aggressive downshifting and releasing

2. Engine Problems

- High heat generation and thermal stress
- Deposit build up on pistons and rings Engine damage, loss of power
- High shear and high pressure will cause reduction in viscosity

3. Gear Problems

- Huge pressures and stress
- Scuffing / scoring of the gears
- Wear resistance

Solution : Instant Response

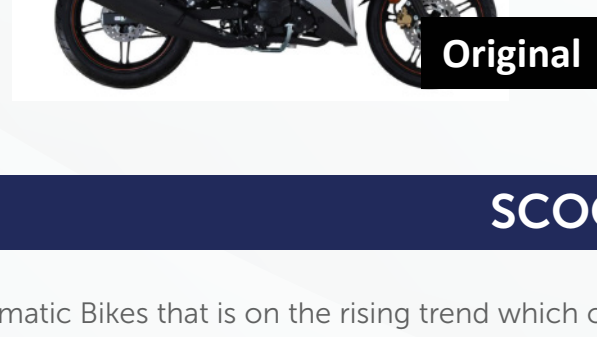
- Prevents clutch slippage and enhances clutch performance for high bike responsiveness
- Oil goes into the parts more smoothly so it is smooth during down-shifting and releasing

Solution : Instant Defence

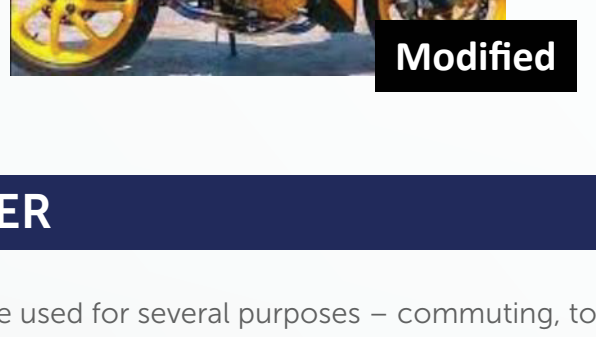
- Strong oil film strength that prevents the lubricant from thickening or thinning which means better viscosity control.
- Results in instant defence/protection for pistons and gears.
- Pistons – reduce deposits
- Gears – resist shear

MOPED

Smaller CC (<150cc) bikes which is used everyday as a mode of transport. Major brand such as Honda, and a lifestyle symbol for countries like Vietnam. This category also caters to the female segment where 50% of the users are females.



Original



Modified

SCOOTER

Automatic Bikes that is on the rising trend which can be used for several purposes – commuting, touring and a lifestyle symbol for countries like Vietnam. This category also caters to the female segment where 50% of the users are females.



General Purpose



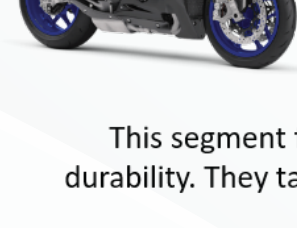
High-Powered



Lifestyle

HIGH PERFORMANCE

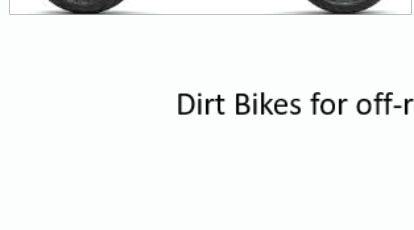
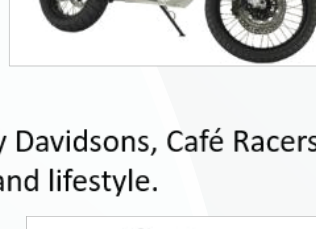
High performance bikes that is above 250cc which is more diverse – can be for commuting, a hobby, collection and for passion purpose such as touring and long distance riding. For those in this category, 95% of them are passionate about bikes.



SPORTS
This segment focuses on speed and goes to track to test their bike performance. Usually a fan of MotoGP as well.

This segment focuses on long distance riding and durability. They talk about how far their bikes can go and distance travelled.

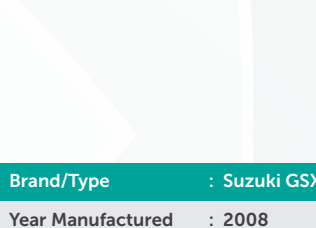
TOURING



CUSTOM BIKES
This segment is for the Harley Davidsons, Café Racers etc. which focuses on aesthetics and lifestyle.

OFF-ROAD

Dirt Bikes for off-roads and dirt track hobby & motorsports.

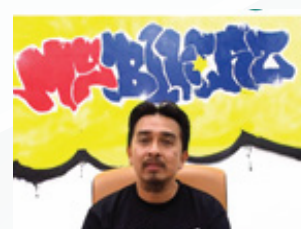


Rider's Comment



Noorzailee Zainuddin
"I have used this oil on my bike from Kuala Lumpur to Southern Thailand, to Farang and back to Kuala Lumpur as being as 1647KM. In my opinion, this oil is so good in terms of gear changing from top to low gear and speeding up is very light and easy."

Milleage : 2151 KM



Mohd Suhaimi Muhammad
"Better respond than previous. Gear drop adjustment and motorcycle speeding overtake cars and other vehicles. For long distance, the engine is very smooth and the heat of the motorcycle is reduced from before."

Milleage : 1412 KM



Wan Lesmana Hakim
"Riding becoming more efficient. Gear shifting become smoother. So far feeling great."

Milleage : 1176 KM

Brand/Type	: Suzuki GSXR 3000
Year Manufactured	: 2008
Engine Size	: 1000c.c
Current Mileage	: 50,000km [Start]
Oil Capacity	: 3 Liter
Previous Oil	: Motul 10W-40
Current Oil	: Sprinta F900 10W-40
Riding Condition	: Weekend Longride
Cooling System	: Liquid
Coolant Type	:
Last Service Date	: 1 March 2019
Type of Last Service	: Normal Service – Oil Change
Parts Change	: Oil Filter
Fuel Type	: RON 95

Brand/Type	: Honda CB 650 F
Year Manufactured	: 2015
Engine Size	: 650c.c
Current Mileage	: 41,000km [Start]
Oil Capacity	: 3 Liter
Previous Oil	: Platinum Oil
Current Oil	: Sprinta F900 10W-40
Riding Condition	: Weekend Longride
Cooling System	: Liquid
Coolant Type	: Coolant Honda
Last Service Date	: April 2019
Type of Last Service	: Normal Service – Oil Change
Parts Change	: Oil Filter
Fuel Type	: RON 95

Brand/Type	: Kawasaki Z800
Year Manufactured	: 2017
Engine Size	: 800c.c
Current Mileage	: 41,000km [Start]
Oil Capacity	: 3.7 Liter
Previous Oil	: Sprinta F900 10W-40
Current Oil	: Sprinta F900 10W-40
Riding Condition	:
Cooling System	: Liquid
Coolant Type	:
Last Service Date	: 3 April 2019
Type of Last Service	: Normal Service – Oil Change
Parts Change	: Oil Filter
Fuel Type	: RON 95

- Meets the requirements of high performance engines, formulated with fully synthetic and environmentally friendly lubricant technology
- Exceptional wear protection at start-up and effective lubrication under high temperatures
- Meets the requirements of bikes fitted with catalytic converters with low sulphur and phosphorus formulation
- Meets the latest environmental compliance standards.

