



LUBRICATION **ADVICE**

BY MANUFACTURER



BMW MOTORRAD
SUZUKI
YAMAHA
HARLEY DAVIDSON / BUELL
HONDA
KAWASAKI

ELF, THE MOTORBIKE, SCOOTER AND QUAD BIKE LUBRICANT SPECIALIST



A brand of **TOTAL**





THE ELF BRAND

The Elf brand has existed for over 40 years. The ELF lubricants retain a modern and high-tech brand image. The quality of the products stands out because of Elf's partnerships and its association with competitive motorsports.

THE HISTORY OF THE BRAND

The Elf brand was founded in France in 1967.

Huge 'red circles' were painted on the facades of the petrol stations of the Union Générale des Pétroles distribution network, which used to include several oil companies: Caltex, Avia, La Mure, CFPP and Lacq. Since 2000, it joined the TOTAL group.

THE ELF LUBRICANTS

ELF Lubrificants maintains the image of a competitive high-performance brand. It is a successful, all-conquering and winning brand thanks to its technical and technological innovations.

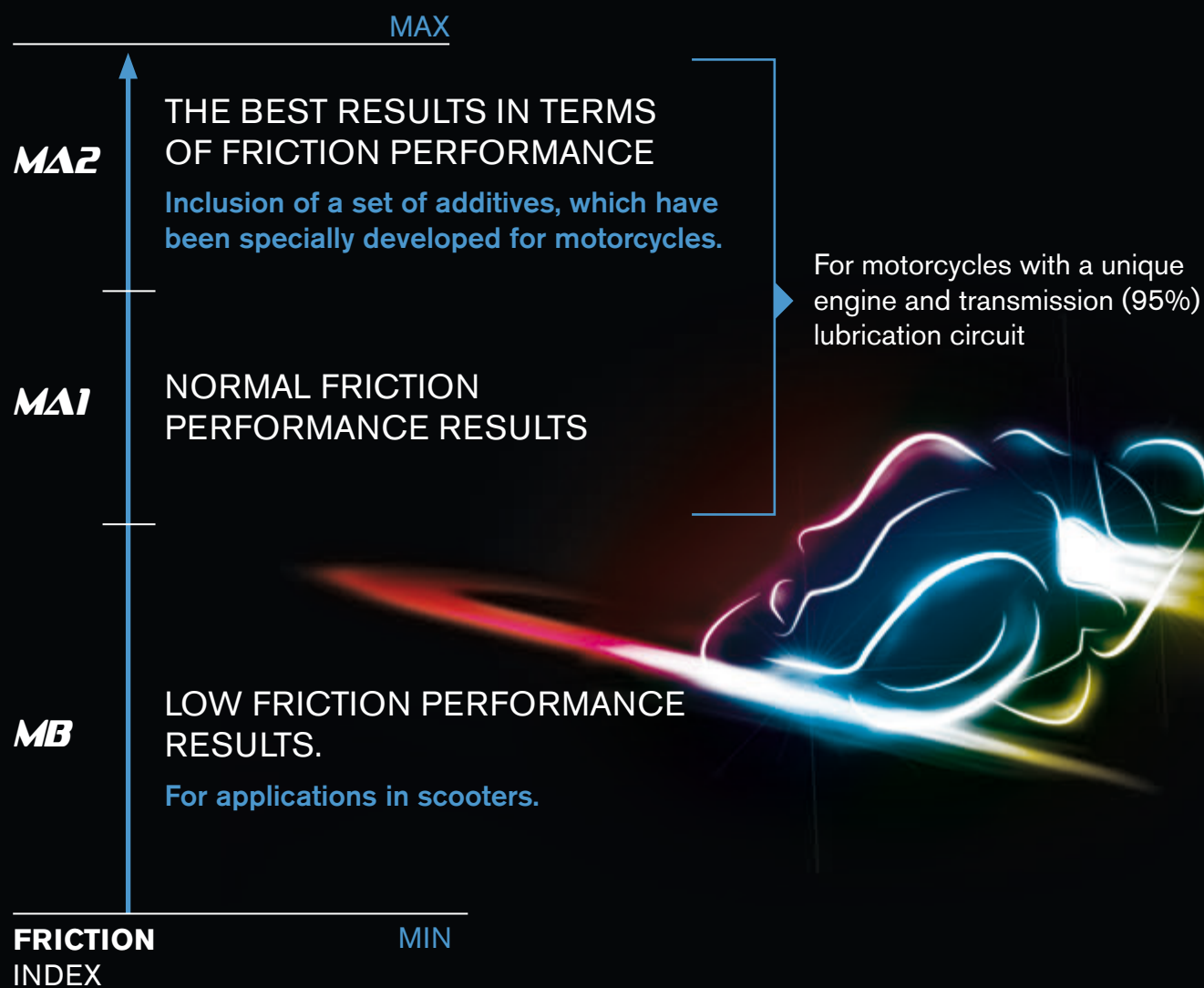
Currently, this is the expertise that ELF would like to promote. All of these years of research and innovation dedicated to motorsports are the reason why Elf continually provides high-performance and effective oils designed to protect engines.

Use Elf oil and you have a specialist by your side every day!

ENGINE MOTOR 4T

JASO T-903 STANDARDS

LUBRICANT SPECIFICATIONS, WHICH INCLUDE:



FRICTION SPECIFICATION (PROTECTION OF GEARS)

EVALUATION ITEM	TEST PROCEDURE	STANDARD INDEX				
		1999 and 2004		APRIL 2006	APRIL 2006	
		MA	MB		MB	MA1
DFI (Dynamic friction characteritic index - DFI)	JASO T 904	≥1,45	<1,45	≥0,50 <1,45	≥1,45 <1,80	≥1,80 <2,50
SFI (Static friction characterisation index - SFI)		≥1,15	<1,15	≥0,50 <1,15	≥1,15 <1,70	≥1,70 <2,50
STI (Stop time index - STI)		≥1,55	<1,55	≥0,50 <1,55	≥1,55 <1,90	≥1,90 <2,50

ENGINE OIL PERFORMANCE

SPECIFICATIONS	1999	2004	2006	OCT. 2011
API	SE, SF, SG, SH, SJ	SE, SF, SG, SH, SJ, SL	SG, SH, SJ, SL, SM	SG, SH, SJ, SL, SM, SN
ILSAC	GF-1, GF-2	GF-1, GF-2	GF-1, GF-2, GF-3	GF-1, GF-2, GF-3
ACEA	A1, A2, A3	A1, A2, A3	A1/B1, A3/B3, A3/B4, A5/B5, C2, C3	A1/B1, A3/B3, A3/B4, A5/B5, C2, C3, C4
CMCC	G-4, G-5	G-4, G-5	-	-

LEVEL ACEA, ILSAC OR API MINIMUM

- Almost all the MOTORCYCLE products have a minimum API level.
- 2011 update: SG -> SN, GF-4, GF-5 not approved.
- Fuel Economy Grades with friction modifiers.

INCREASE IN THE TEMPERATURE CONDITIONS OF THE ENGINE REQUIRING LUBRICANTS WITH SUPERIOR RESISTANCE TO OXIDATION.

- Inline JASO, API SE and SF are no longer approved since 2006.
- API SG is the minimum level.

PHYSICOCHEMICAL PROPERTIES (PROTECTION OF GEARS)

ITEM	TEST METHOD		LIMIT		
	JIS	ASTM	1999	2004	APRIL 2006
Sulfated ash, %	K2272	D874	1.2 max	1.2 max	1.2 max
Phosphorus content, m%	JPI 5S-38				0.08 min - 0.12 max
Evaporative loss, m%	JPI 5S-41-93	D5800	20 max	20 max	20 max
Foaming tendency, ml					
Seq I			10/0 max	10/0 max	10/0 max
Seq II	K2518	D892	50/0 max	50/0 max	50/0 max
Seq III			10/0 max	10/0 max	10/0 max
Shear stability; mm ² /s					
xW-30			9.0 min	9.0 min	9.0 min
xW-40	JPI 5S-29-88 (Note 1)	D6278	12.0 min	12.0 min	12.0 min
xW-50			15.0 min	15.0 min	15.0 min
other grades					stay in grade
High temperature, high shear rate vis (150°C) mPa.s	JPI 5S-36-91	D4683	2.9 min	2.9 min	2.9 min

MINIMUM PHOSPHORUS RATING FOR PROTECTING THE GEARS

- JASO in-line with the minimum P content since 2006.

THE ROLE OF THE LUBRICANT

WHY MOTORCYCLE IS DIFFERENT FROM PASSENGER CAR OIL?

4-Stroke (4T) motorcycles have mainly **single circuit for engine**, clutch and gearbox. Due to higher requirement for gearbox protection, the motorcycle oil should contain phosphorus to help minimize wear from metal-to-metal contact.

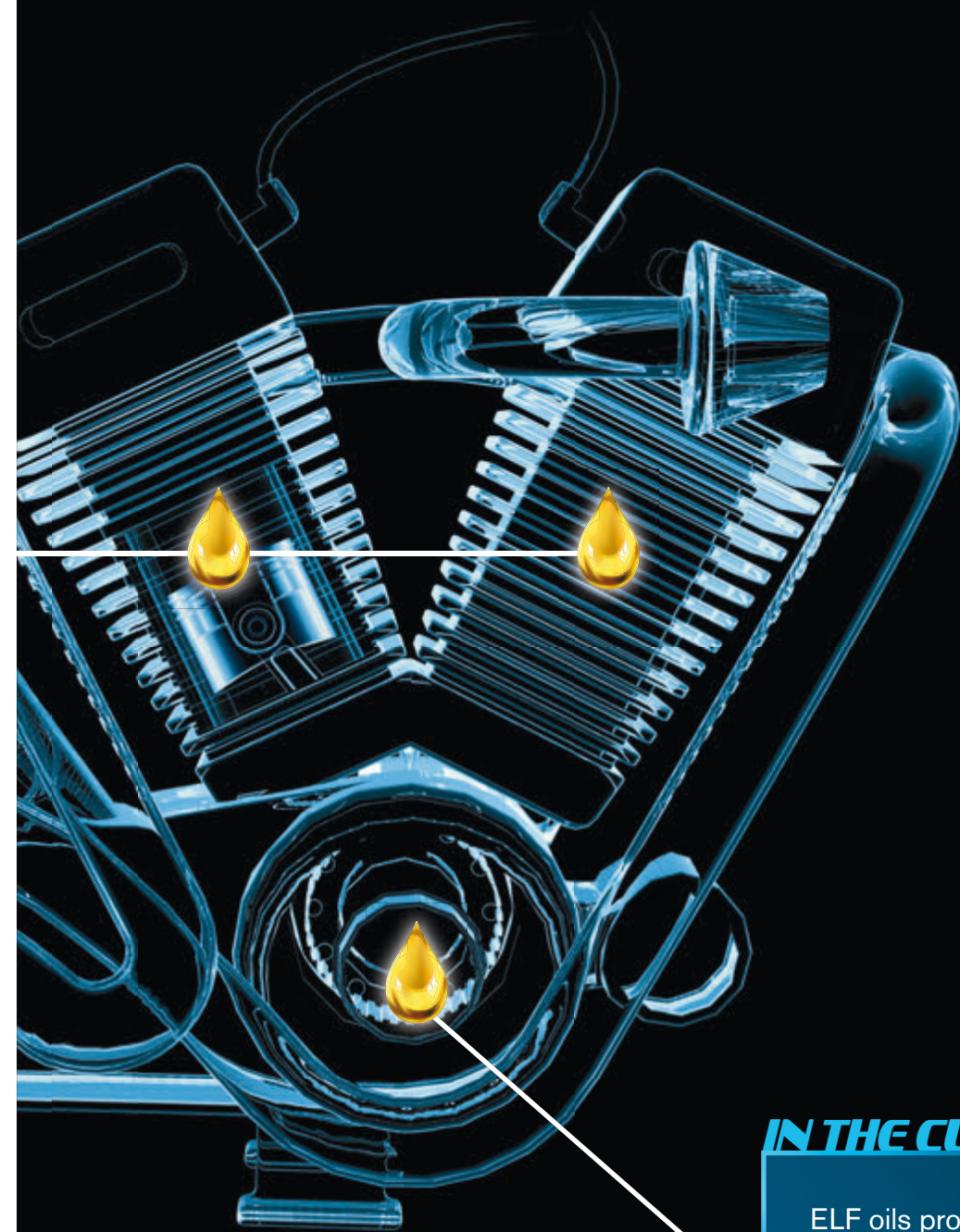
IN THE ENGINE

ELF products provide protection for all engine components: pistons, cams, cylinder sleeves, valve train and crankshaft.

The engine stays clean and runs optimally.

IN THE GEARBOX

ELF technology provides resistance to extreme pressure along with **optimum gearbox protection.**



IN THE CLUTCH

ELF oils provide a uniform film between the clutch discs.

They prevent malfunction and bring an appropriate coefficient level.

BMW MOTORRAD

LUBRICATION ADVICE

ENGINE

K SÉRIES

- ✓ ELF MOTO⁴ROAD 15W-50
- ✓ ELF MOTO⁴ROAD 10W-40

R SÉRIES

- ✓ ELF MOTO⁴ROAD 15W-50
- ✓ ELF MOTO⁴ROAD 10W-40
- ✓ ELF MOTO⁴TECH 10W-50

F SÉRIES

- ✓ ELF MOTO⁴ROAD 15W-50
- ✓ ELF MOTO⁴ROAD 10W-40
- ✓ ELF MOTO⁴TECH 10W-50

G SÉRIES BEFORE 2010 (SOHC ON BOXER ENGINE)

- ✓ ELF MOTO⁴ROAD 15W-50
- ✓ ELF MOTO⁴ROAD 10W-40

G SÉRIES AFTER 2010 (DOHC ON BOXER ENGINE)

- ✓ ELF MOTO⁴TECH 10W-50

SPORTS MODELS

HP2, S1000RR, K1200, K1300

- ✓ ELF MOTO⁴RACE 10W-60

SPECIFIC MODELS

C1, C600 SPORT/C650 GT, K1200 GT/RS, K1300 GT/R/S/R SPORT, K1600 GT/GTL, S1000 RR

- ✓ ELF MOTO⁴PRO TECH 5W-40



ELF MOTO⁴ROAD
15W-50

ELF MOTO⁴ROAD
10W-40

ELF MOTO⁴TECH
10W-50

ELF MOTO⁴RACE
10W-60

ELF MOTO⁴PRO TECH
5W-40

GEARBOX

TRANSELF SYN FE 75W-90

✓ All models



SHAFT

TRANSELF SYN FE 75W-90

✓ All models



COOLING

ELF MOTO COOLANT ORGANIC

✓ All models



BRAKES AND CLUTCH

DOT 4 or 5.1

✓ All models (preference for DOT 5.1 on the ABS models)



EXTRA INFORMATION

For hot destinations (+20°C), a summer grade of at least 50 is preferable.

For recent engines with «well-managed» clearances, a winter viscosity grade of 10 is sufficient.

A winter grade of 15 is suitable for operating and starting temperatures down to 0°C.

For sports models, a viscosity of 10W60 is recommended.

ENGINE

SMALL AND MEDIUM SIZED ENGINES TRAIL & CLASSICS

- ✓ ELF MOTO⁴ROAD 10W-40

ROAD AND SPORTS ROADSTERS

- ✓ ELF MOTO⁴TECH 10W-50

TWIN-CYLINDER ENGINES (CUSTOM BIKES OR HIGH-CAPACITY SINGLE CYLINDER BIKES)

- ✓ ELF MOTO⁴TWIN TECH 20W-60

POST-2004 MODELS (INCLUDING 4-STROKE SCOOTERS)

- ✓ ELF MOTO⁴MAXI TECH 10W-30

SPORTS MODELS

- ✓ ELF MOTO⁴RACE 10W-60



ELF MOTO⁴ROAD
15W-50

ELF MOTO⁴TECH
10W-50

ELF MOTO⁴TWIN TECH
20W-60

ELF MOTO⁴MAXI TECH
10W-30

ELF MOTO⁴RACE
10W-60

2-STROKE GEARBOX

ELF MOTO GEAR OIL 80W-90

- ✓ All models with 2-stroke engines



TRANSMISSION

ELF MOTO GEAR OIL 10W-40

- ✓ All models with shaft drive



COOLING

ELF MOTO COOLANT ORGANIC

- ✓ All models with liquid cooling systems



BRAKES AND CLUTCH

DOT 4 or 5.1

- ✓ All models (preference for DOT 5.1 on the ABS models)



YAMAHA

LUBRICATION ADVICE

ENGINE

SMALL AND MEDIUM SIZED ENGINES

TRAIL & CLASSICS

- ✓ ELF MOTO⁴ROAD 10W-40

ROAD AND SPORTS ROADSTERS

- ✓ ELF MOTO⁴TECH 10W-50

TWIN-CYLINDER ENGINES

(CUSTOM BIKES OR HIGH-CAPACITY SINGLE CYLINDER BIKES)

- ✓ ELF MOTO⁴TWIN TECH 20W-60

POST-2004 MODELS

(INCLUDING 4-STROKE SCOOTERS)

- ✓ ELF MOTO⁴MAXI TECH 10W-30

SPORTS MODELS

- ✓ ELF MOTO⁴RACE 10W-60



ELF MOTO⁴ROAD
15W-50



ELF MOTO⁴TECH
10W-50



ELF MOTO⁴TWIN TECH
20W-60



ELF MOTO⁴MAXI TECH
10W-30



ELF MOTO⁴RACE
10W-60

2-STROKE GEARBOX

ELF MOTO GEAR OIL 80W-90

- ✓ All models with 2-stroke engines



TRANSMISSION

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BRAKES AND CLUTCH

DOT 4 or 5.1

- ✓ All models (preference for DOT 5.1 on the ABS models)



HARLEY DAVIDSON CYCLES

LUBRICATION ADVICE

ENGINE

PRE-1984

FLATHEAD, KNUCKLEHEAD,
PANHEAD, SHOVELHEAD,
IRONHEAD

✓ ELF MOTO⁴ CRUISE 20W-50



ELF MOTO⁴ CRUISE
20W-50

POST-1984

BLOCKHEAD, TWIN CAM 88 & 96, RÉ-
VOLUTION,
SPORTSTER EVO. & EVO II, BUELL

✓ ELF MOTO⁴ TWIN TECH 20W-60



ELF MOTO⁴ TWIN TECH
20W-60

GEARBOX

ELF MOTO GEAR OIL **80W-90**

OPTION ELF MOTO GEAR OIL **75W-140**

- ✓ All models (excluding the Sportster range, Twin Cam generation -1999 and beyond)



PRIMARY

ELF MOTO GEAR OIL **10W-40**

- ✓ All models (excluding the Sportster range)



GEARBOX & PRIMARY GAMME SPORTSTER (LUBRIFICATION COMMUNE)

ELF MOTO GEAR OIL **10W-40**

- ✓ All Sportster models (possibility of using the recommended engine oil)



COOLING

ELF MOTO COOLANT ORGANIC

- ✓ All models with liquid cooling systems



EXTRA INFORMATION

For hot destinations (+20°C), a summer grade of 60 is preferable.

For prepared models and high individual cylinder capacities, the viscosity grade of 20W-60 is recommended.

Possible to use the MOTO 4 TWIN TECH in the three engine sections (Twin Cam (1999) and Sportster Evo generation and later).

ENGINE

SMALL AND MEDIUM SIZED ENGINES TRAIL & CLASSICS

- ✓ ELF MOTO⁴ROAD 10W-40

ROAD AND SPORTS ROADSTERS

- ✓ ELF MOTO⁴TECH 10W-50

TWIN-CYLINDER ENGINES (CUSTOM BIKES OR HIGH-CAPACITY SINGLE CYLINDER BIKES)

- ✓ ELF MOTO⁴TWIN TECH 20W-60

POST-2004 MODELS (INCLUDING 4-STROKE SCOOTERS)

- ✓ ELF MOTO⁴MAXI TECH 10W-30

SPORTS MODELS

- ✓ ELF MOTO⁴RACE 10W-60



ELF MOTO⁴ROAD
15W-50

ELF MOTO⁴TECH
10W-50

ELF MOTO⁴TWIN TECH
20W-60

ELF MOTO⁴MAXI TECH
10W-30

ELF MOTO⁴RACE
10W-60

2-STROKE GEARBOX

ELF MOTO GEAR OIL 80W-90

- ✓ All models with 2-stroke engines



TRANSMISSION

ELF MOTO GEAR OIL 10W-40

- ✓ All models with shaft drive



COOLING

ELF MOTO COOLANT ORGANIC

- ✓ All models with liquid cooling systems



BRAKES AND CLUTCH

DOT 4 or 5.1

- ✓ All models (preference for DOT 5.1 on the ABS models)



KAWASAKI

LUBRICATION ADVICE

ELF AND KAWASAKI

Since 2007, Elf and Kawasaki have confirmed their partnership in motorsports and the endorsement of Elf Moto lubricants in several countries for both first fill and service fill applications. In 2014 Elf continues this support to the official Kawasaki teams in WSBK and WSS. Last year saw fantastic achievements with Kawasaki riders finishing either on top or very close to the top podium spot, plus the hat trick at the Le Mans 24 hours for SRC team, winning for the 3rd time this mythic race, and the same year the Bol d'Or 24 hours.



ENGINE

ELF VENT VERT 10W-50

- ✓ All 4-stroke models (for the subsidiaries with an agreement with Kawasaki)

ELF MOTO⁴ TECH 10W-50

- ✓ All 4-stroke models (for the other subsidiaries)



2-STROKE GEARBOX

ELF MOTO GEAR OIL 80W-90

- ✓ All models with 2-stroke engines



TRANSMISSION

ELF MOTO GEAR OIL 10W-40

- ✓ All models with shaft drive



COOLING

ELF MOTO COOLANT ORGANIC

- ✓ All models with liquid cooling systems



BRAKES AND CLUTCH

DOT 4 or 5.1

- ✓ All models (preference for DOT 5.1 on the ABS models)



SCOOTER

RANGE

2-STROKE



ELF SCOOTER² SELF MIX

ELF SCOOTER² SELF MIX is a high-quality product, which uses anti-deposit technology and minimises polluting emissions.



ELF SCOOTER² STREET

ELF SCOOTER² STREET is a new generation lubricant with a dynamic profile, an innovative formula and a remarkable capacity to reduce exhaust emissions.



ELF SCOOTER² STREET MAX

ELF SCOOTER² STREET MAX is a top-of-the-range lubricant formulated for demanding users, primarily seeking optimum efficiency and guaranteed engine protection.

4-STROKE



ELF SCOOTER⁴CITY 10W-40

ELF SCOOTER⁴CITY is a special lubricant with an anti-wear formulation, which guarantees optimum engine protection as well as driving comfort.



ELF SCOOTER⁴MAXI CITY 5W-40

ELF SCOOTER⁴MAXI CITY is designed for the most recent 4-stroke engines, which consume less oil and have longer oil change intervals. Easier cold start, greater flexibility and thermal resistance. ELF SCOOTER⁴MAXI CITY complies with the latest environmental standards and technological advances.

GEAR OIL



2T



ELF MOTO GEAR OIL 10W-40

ELF MOTO GEAR OIL 10W-40 was specially developed for 2-stroke motorcycle gearboxes. It guarantees higher protection of gearboxes and optimum safety when changing gear.

SYNTHETIC BASED OIL
API SJ
Pack: 1 L



4T



ELF MOTO GEAR OIL 80W-90

ELF MOTO GEAR OIL 80W-90 was specially developed for 4-stroke motorcycle gearboxes. It guarantees an optimal safety when changing gear.

MINERAL OIL
API GL 5
Pack: 1 L

FORK OIL



ELF MOTO FORKOIL SYN 2,5W / 5W / 10W

ELF MOTO FORK OIL SYN for forks and shock absorbers provides maximum safety even in harsh use. Suitable for road and off-road motorcycles.

100% SYNTHETIC OIL
Pack: 0,5 L



ELF MOTO FORK OIL 10W / 15W / 20W

ELF MOTO FORK OIL for forks and shock absorbers. Provides optimum safety for the whole suspension system of road and off-road motorcycles.

MINERAL OIL
Pack: 0,5 L

COOLANT



ELF MOTO COOLANT ORGANIC

ELF MOTO COOLANT ORGANIC is 100% organic coolant with an exceptional anti-corrosion property for light alloy circuits. Anti-freeze protection of all cooling system components up to -26°C. Non-aggressive.

ORGANIC
AFNOR NFR 15-601, ATSM D3306, BS 6580
Pack: 1 L



ELF MOTO COOLANT MINERAL

ELF MOTO COOLANT MINERAL is a mineral coolant. Optimum protection of circuits, prevents casing corrosion for prolonged engine life. Anti-freeze protection up to -26°C. Does not attack paint in case of contact.

MINERAL
AFNOR NFR 15-601, BS 6580
Pack: 1 L

BRAKE FLUID



ELF MOTO BRAKE FLUID DOT 5,1

ELF MOTO BRAKE FLUID DOT 5.1 is a very high-performance synthetic brake fluid. Silicon-free, for all braking systems, it provides optimum safety. Miscible with all other chemical synthetic fluids of the DOT3, DOT4 and DOT 5.1 type with the exception of silicon DOT 5 fluids and special fluids of the LHM type.

100% SYNTHETIC
FMVSS 116 DOT 5.1
Pack: 500 ml



ELF MOTO BRAKE FLUID DOT 4

ELF MOTO BRAKE FLUID DOT 4 is a high-performance brake fluid. Stable and incompressible at all temperatures, it provides optimum safety. Miscible with all other chemical synthetic fluids of the DOT3, DOT4 and DOT 5.1 type with the exception of silicon DOT 5 fluids and special fluids of the LHM type.

100% SYNTHETIC
FMVSS 166 DOT 4
Pack: 500 ml

PROTECTION



ELF MOTO AIR FILTER OIL

ELF MOTO AIR FILTER OIL is a foam air filter penetrating oil specially developed to reduce the risk of breakdown and to prolong engine life.

BLUE COLOR
Pack: 1 L

DEGREASANT



ELF 6 IN 1 MULTI LUBRICANT

ELF 6 IN 1 MULTI LUBRICANT is a multi-purpose aerosol. Lubricates, cleans and protects all the vital components of your motorcycle.

Pack: 400 ml



ELF N CONTACT

ELF N CONTACT is a dry cleaner for brakes, carburetors, plugs, metal surfaces. Degreasant and multi-purpose cleaner for all motorcycle parts. Degreases quickly and leaves no residue. Practical spray to reach the most inaccessible places. Pressure jet to remove the most stubborn dirt..

Pack: 400 ml

CHAINS



ELF MOTO CHAIN LUBE

ELF MOTO CHAIN LUBE is a very high-performance grease for transmission chains. Its formula was specially developed to provide optimum lubrication under the harshest running conditions. Successfully tested during motorcycle grand prix and rally-raids. Leave dry thoroughly.

ORGANIC

Pack: 400 ml



ELF MOTO CHAIN PASTE

ELF MOTO CHAIN PASTE is a new generation extreme-pressure grease for motorcycle chains. Waterproof, provides exceptional lubrication under the harshest driving conditions. To spread with a brush.

ORGANIC

Pack: 250 ml

CARE



ELF MOTO SHAMPOO

ELF MOTO SHAMPOO is a ready-to-use concentrated shampoo with protective wax to wash and shine all the parts of your motorcycle. Efficiently removes all greasy marks and residue from fairings, engines, sensitive parts, wheels and rims. Leave no marks when dry. Non-aggressive.

SHAMPOO

Pack: 400 ml



ELF MOTO POLISH

ELF MOTO POLISH is a polishing cream conceived to remove micro-scratches and revive all painted surfaces and fairings. Removes all traces of dirt, in particular stubborn insect traces. Prevents paintwork corrosion due to the complex of protective additives.

CREAM

Pack: 400 ml



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