



RACING
Fuels & Lubricants
INTERNATIONAL PRODUCT GUIDE



elfracing.com



EDITORIAL

RACING Fuels & Lubricants



For more than 50 years, the company TotalEnergies, in particular through its ELF brand, has been a competitive, innovative and successful brand.

Thanks to years devoted to motorsport research and innovation, our products will allow you to achieve excellence. They have been a reference in the most prestigious international competitions for decades.

Hence, the TotalEnergies Additives and Fuels Solutions (TEAFS) team are pleased to present our International Product Guide.



TotalEnergies Additives & Fuel Solutions (TEAFS) : More than 110 employees committed every day to your passion for racing.



KEY FIGURES

- ▶ More than **50** years in motorsport business
- ▶ In 2022, more than **20** different exclusive championships supplied worldwide and more than **170** international races
- ▶ More than **110** people work to propose you the best products
- ▶ In 2022, **39%** of our volumes composed of renewable resources

Coordination : TotalEnergies additives and fuels solutions
Conception : Département Marketing de TotalEnergies additives and fuels solutions
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International Product Guide - 10/2023

RACING FUELS



PRODUCT RANGE

RACING FUELS

	AUTO	MOTO	KARTING	HISTORIC	TRUCK	4-STROKE	2-STROKE	TURBO	ATMO	CONTROL FUEL	FIA	FIM	NO REGULATION	PAGE
EXCELLIUM RACING 100	•					•		•	•		•			10
EXCELLIUM RALLY	•					•		•	•	•	•			12
TURBO REF	•					•		•			•			14
ATMO MAX	•					•			•				•	15
ELF CORE 50	•	•	•			•	•	•	•	•	•			16
ELF RACE 102	•	•	•			•	•	•	•	•			•	18
ELF RACE 102 J	•	•	•			•		•	•		•			19
PERFO 105	•	•				•		•					•	20
PERFO 100	•					•		•					•	21
4S FIM EVOX		•				•			•			•		22
MOTO 2 FIM		•				•	•		•	•		•		22
MIT 46		•	•				•		•			•		24
ELF E90R 2G	•					•		•	•				•	25
ATMO VINT	•					•			•				•	27
AVSP 11 VS	•	•		•		•	•	•	•				•	27
C-140	•				•	•		•					•	28
GRT3	•				•	•		•		•	•			29

RACING FUELS

2-STROKE

4-STROKE

ATMO

TURBO

WHAT IS A RACING FUEL ?



Fuel developed for motorsport engines (2 or 4-strokes)

Volumetric ratio ↗

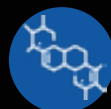
Fill ratio ↗

Turbo pressure ↗



Optimizing the engine performance / reliability

Fuels are optimized to meet expectations of engine manufacturers.



Formulation made from high quality / with optimum blending control

Constant engine settings.



Follow the different official regulations (FIA-FIM) when required

RON/MON, chemical composition, vapor pressure, density...

WHAT DIFFERENCE ?



PUMP FUELS

Rafinery output quality

Comply with the EN228 (Europe)

Variability in time depending on crude oil, and refinery's seasonality specifications

Generic utilization

All kind of engine



RACING FUELS

Bases + solvents / Qualitative molecules selections

Specific technical regulations (FIA - FIM)

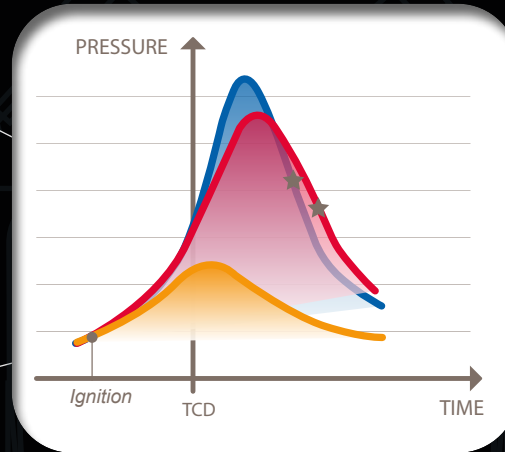
Constant formulation > same engine settings during all the championship (knocking limits)

Specific needs for racing engines

Specific adaptation for precise engine application

MORE THAN 50 YEARS OF "KNOW-HOW" IN RACING FUELS...

Fuel composition determines properties of fuel combustion in engine



ALCOHOL
ETHER

Inlet Air Cooling
Supercharging Effect

"VAPOR
LOCK" ISSUE

Control of volatile molecules

OXYGENATES
AROMATICS

Anti-knocking
properties

OLEFINS

High combustion speed

ADDITIVES

Detergent, ARS (Valve seats
protection), Oxidation inhibitors



WHAT IS A BIO RACING FUEL ?



Fuel obtained from biomass (1G or advanced-2G biofuels)



The blend of conventional + biofuel must meet the country's specifications.



The fuel must demonstrate a +50% reduction in CO2 emissions (over the entire product cycle).

We offer a wide range of racing products made from pure and renewable molecules, providing constant properties over time. This optimal quality ensures high-level performance, in accordance with racing requirements while providing Green House Gases (GHG) emissions savings.

Our range offers a wide variety of products, designed to fit all motorsport actors needs, with different incorporation levels of biomolecules within the fuel. These fuels meet the requirements of each user, whether they have to be compliant with EN228, FIA or FIM standard, but also, they are designed to fit the best the engine requirements as they are adapted to 4-stroke turbocharged or atmospheric engines, but also 2-stroke engines.

No need to modify the engine hardware but it is preferable to adjust the engine mapping to optimize the engine performance (injection parameters, Air/Fuel ratio, ignition timing, ...).

For any question, please contact us.

TWO TYPES OF BIOFUEL



Fuel not incorporated

Biofuels where the amount to be incorporated is restricted by technical limitations



Drop-in fuel

Alternative fuel fully interchangeable and compatible with conventional fuel

BIO FUELS FEEDSTOCK

First generation, 1G, feedstock

- Conventional (first-generation) biofuels are produced from food crops (sugar, starch, oil), such as palm, rapeseed, soy, beets and cereals (corn, wheat, etc)
- 1G biofuels have lower GHG saving compared to the advanced biofuels

Second generation, 2G, (advanced) feedstock

- Advanced biofuels are produced from lignocellulosic feedstocks (i.e. agricultural and forestry residues, e.g. wheat straw/corn stover/bagasse, wood based biomass), non-food crops (i.e. grasses, miscanthus, algae), industrial waste or residue streams
- Advanced biofuels have higher GHG savings compared to the fossil fuels described in RED directive (> 65% over the entire product cycle).

*GHG : (GreenHouse Gases)

excellium

Racing 100



COMPLIANT WITH 2022 FIA APPENDIX J

2 & 4-STROKE

ATMO & TURBO

- 100% SUSTAINABLE FUEL*
- PERFORMANCE & EFFICIENCY
- COST EFFECTIVE

RON 101.5
MON 89.5



EXCELLIUM RACING 100 is a certified 100% sustainable* fuel, which will be introduced for the first time in the FIA World Endurance Championship (WEC) in March 2022 during the first event of the championship, the 1000 miles of Sebring (USA).

Designed and manufactured by TotalEnergies, Excellium Racing 100 is produced from bioethanol, which is itself produced from vineyard residues (from French agriculture).

APPLICATION :

Official fuel FIA WEC, including the 24H du Mans and the European Le Mans Series

SUSTAINABLE

24h
LE MANS.

TotalEnergies
OFFICIAL FUEL PARTNER

FIA WEC
CHAMPIONSHIP



FUELS

LUBRICANTS

TECHNICAL FLUIDS



excellium
RALLY



COMPLIANT WITH 2022 FIA APPENDIX J

4-STROKE

ATMO & TURBO

- 10% OF RENEWABLE MATERIAL
- PERFORMANCE / RELIABILITY
- COST EFFECTIVE

OXYGEN CONTENT **3.70% m/m**
RON **101.7**
MON **88.4**

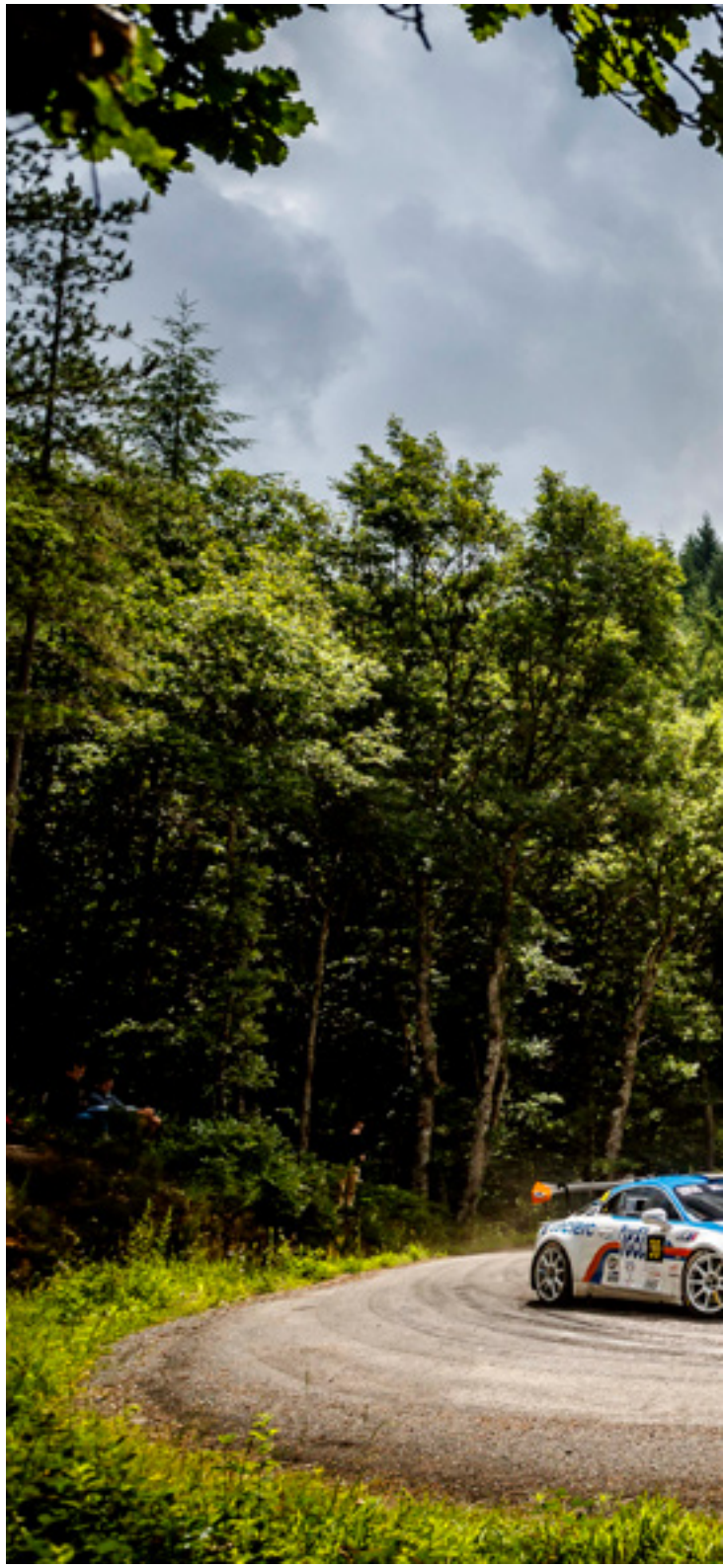
EXCELLIUM RALLY is used by top teams, compliant with 2022 FIA Appendix J regulation.

Is an unleaded racing fuel, consist to 10% of renewable material and designed to be used either in turbo-charged or naturally aspirated 4-stroke engines. This fuel offers a perfect balance between performances and reliability.

EXCELLIUM RALLY is used by many national teams around the world in the rally market. Engine maps are prepared by main manufacturers of R5 serie.

APPLICATION: Turbo-charged engine and naturally-aspirated engines : WRC, R5, R2...

Official FIA WRC FUEL 2019 -2020 - 2021





FUELS

LUBRICANTS

TECHNICAL FLUIDS

ELF TURBO REF



COMPLIANT WITH 2022 FIA APPENDIX J

4-STROKE

TURBO

- MAXIMUM PERFORMANCE
- HIGH PROTECTION AGAINST KNOCKING

OXYGEN CONTENT **3.60% m/m**
 RON **101.4**
 MON **86.5**



ELF TURBO REF is the racing fuel reference on the market, optimized for turbo-charged engines within the FIA regulation (Appendix J 2022), specifically designed for R5 engines.

With a choice of high energy content molecules allowing a high compression rate, **ELF TURBO REF** leads to an optimized cycle efficiency.

APPLICATION : WRC, R5, R4, R3, Gr A, Gr N,...

RENEWABLE





ELF ATMO MAX



NO REGULATION

4-STROKE

 ATMO

- MAXIMUM PERFORMANCE
- HIGH COMBUSTION SPEED

OXYGEN CONTENT **3.60% m/m**
RON **101.6**
MON **86.9**



ELF ATMO MAX is formulated with specific olefin compounds, which generate very high combustion speed. This racing fuel delivers excellent engine acceleration and power output.

ELF ATMO MAX is compliant with AMA[®] regulation and very much appreciated by US MX top teams.

It can also be used in former F1 cars.

APPLICATION: Former F1, US MX...



Used by **professional teams** on US market

RENEWABLE

ELF CORE 50



COMPLIANT WITH 2022 FIA APPENDIX J

4-STROKE

ATMO & TURBO

- PROTECTION AGAINST KNOCKING
- NATURAL SUPERCHARGING EFFECT
- 10% OF RENEWABLE MATERIAL

OXYGEN CONTENT **3.60% m/m**
 RON **101.7**
 MON **88.5**



ELF CORE 50 provides significant enhancement in power and reliability, even with no fine-tuning. To get the greatest benefits from this product, engine mapping should be optimized (Air / Fuel ratio, Ignition timing).

ELF CORE 50 is an unleaded racing fuel consist to 10% of renewable material designed to be used either in naturally-aspirated or turbo-charged 4-stroke engines. This polyvalent fuel is particularly suited as a control fuel when an unique fuel is imposed in series.

APPLICATION: Circuit (GT, monoplace)...



Official fuel of SRO GT Series (Europe, America, Asia) 2020, 2021, 2022 and 2023 !

RENEWABLE





FUELS

LUBRICANTS

TECHNICAL FLUIDS

ELF RACE 102



NO REGULATION

2 & 4-STROKE

 ATMO &  TURBO

- PROTECTION AGAINST KNOCKING
- CAN BE USED WITH ORIGINAL ENGINE MAPPING SET FOR STANDARD PUMP FUEL

OXYGEN CONTENT **3.70% m/m**
 RON > **102.0**
 MON > **88.0**



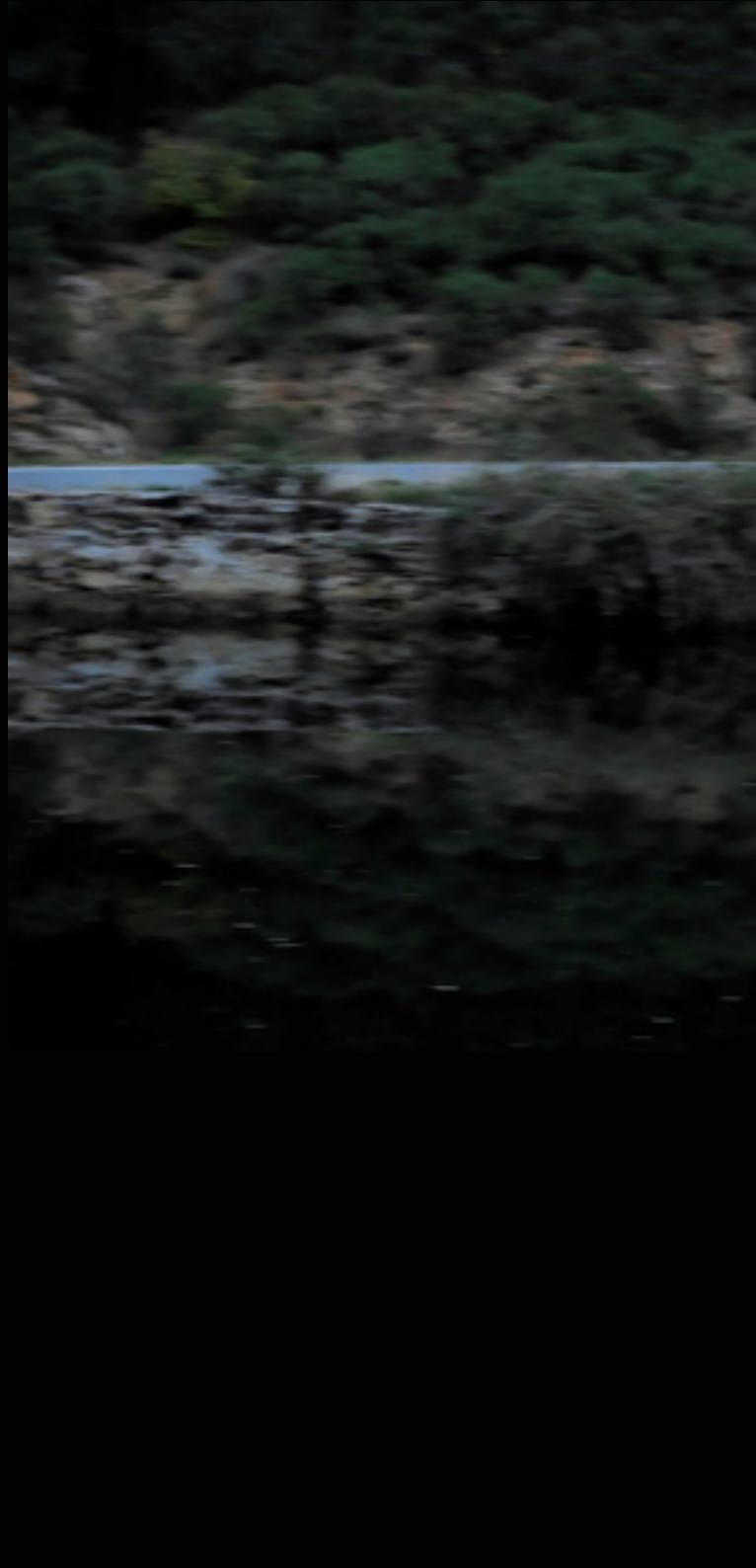
ELF RACE 102 formulation guarantees a fuel with an octane number greater than 102 and with properties that remain stable over time. Developed for all types of racing, this fuel meets the economic expectations of unleaded premium pump fuel users, while providing the quality and performance of a race fuel.

APPLICATION: Multipurpose...

Race technology you can't get at the fuel station: a major success since 2015!



RENEWABLE



ELF RACE 102 J



COMPLIANT WITH 2022 FIA APPENDIX J

2 & 4-STROKE

 ATMO &  TURBO

- MAXIMUM PERFORMANCE
- HIGH COMBUSTION SPEED

OXYGEN CONTENT **3.60% m/m**
RON **102.0**
MON > **88,0**



ELF RACE 102 J is compliant with the 2022 FIA Appendix J regulation.

Developed for all types of racing, ELF RACE 102 J fuel reference meets the economic expectations of service station unleaded 98 fuel users, while providing quality and performance of a race fuel.

ELF RACE 102 J is suitable for turbo-charged or naturally aspirated, 4-stroke engines

RENEWABLE

ELF PERFO 105



NO REGULATION

4-STROKE

TURBO

- OUTSTANDING PERFORMANCE
- HIGH OXYGEN CONTENT
- HIGHEST OCTANE NUMBER

OXYGEN CONTENT **16.50% m/m**
 RON > **110.0** AKI **105.0**
 MON > **97.0**

ELF PERFO 105 is the fuel designed to provide the maximum octane number reachable for an unleaded racing fuel. Unfettered by technical regulations, it has been developed without any compromise. The performance results are spectacular for a large range of heavy loaded engines (up to 10% measured against competitors' unleaded fuel).

ELF PERFO 105 has particularly high octane numbers (RON>110) and oxygen compound content, which require specific mapping and increased injection flow rate. This fuel is much appreciated in the Drag racing community.

APPLICATION: Rally, Hill climb, Drag racing...

Powered the Peugeot 208 T16 Pikes Peak to set **record at Pikes Peak** international hill climb, or the Subaru® WRX STI at **Isle of Man TT**





ELF PERFO 100



NO REGULATION

4-STROKE

TURBO

- HIGH PERFORMANCE
- WITHOUT OXYGEN
- HIGH OCTANE NUMBER

OXYGEN CONTENT **0.00% m/m**
RON > **107.0**
MON > **96.0**

ELF PERFO 100 is an oxygen-free racing fuel with very high octane number (RON >107). Not compliant with FIA regulation, the performance gain measured on turbo engines is considerable.

ELF Research has combined its expertise with the will to push engines and technology beyond known limits, to developed this atypical fuel.

ELF PERFO 100 is the gasoline of the ELF racing range product that has the best octane numbers technically possible for an unleaded and non-oxyganted fuel.

APPLICATION: Rally Cross...



Used in former GRC US top teams



ELF 4S FIM EVOX



COMPLIANT WITH FIM REGULATION

4-STROKE

ATMO

- MAXIMUM PERFORMANCE
- HIGH COMBUSTION SPEED

OXYGEN CONTENT **3.60% m/m**
RON **101.6**
MON **89.5**



ELF 4S FIM EVOX is directly based on ELF's expertise in MotoGP™ and offers maximum performance within the limits of FIM regulation.

ELF 4S FIM EVOX is a top of the range product which enables to improve the performance of your motorbike engine.

Its specific olefin content gives a very high combustion speed that is particularly efficient at high rpm.

APPLICATION: Circuit, Motocross, WSBK™, MX GP™...

Reference in World Superbike and MX Racing.

ELF MOTO 2 FIM



COMPLIANT WITH FIM REGULATION

2 & 4-STROKE

ATMO

- QUALITY CONSISTENCY
- COST EFFECTIVE

OXYGEN CONTENT **2.70% m/m**
RON **101.0**
MON **88.5**



ELF MOTO2 FIM is the cost effective FIM compliant racing fuel for bikers. Compared to pump fuels, its consistency guarantees stable tuning and performance gains at an affordable price.

Used at the 24 Hours Moto, **ELF MOTO2 FIM** provides quality consistency for perfectly controlled combustion.

NB : For 2-stroke engines, should be combined with either **ELF HTX 909** or **ELF HTX 976+** racing lubricants to get the best out of the engine.

APPLICATION: Circuit, SBK™, Endurance, MX, SX, Supermoto...

Former official fuel of Moto2™ and Moto3™ championships.

RENEWABLE

ELF MITS 46



COMPLIANT WITH FIM REGULATION

2-STROKE

 ATMO

- MAXIMUM PERFORMANCE
- HIGH COMBUSTION SPEED

OXYGEN CONTENT 2.60% m/m
RON 101.5
MON 89.5



ELF MITS 46 is the first choice for 2-strokes karting and motorbikes racers. Made for specialists, it requires fine tuning of the engine.

This fuel is the outcome of advanced research based on ELF's expertise in former 2-strokes moto Grand Prix.

Owing to its specific formula, **ELF MITS 46** offers exceptional anti-knock protection and enhances combustion at high speeds.

APPLICATION : Karting, MX...



Should be combined with either **ELF HTX 909** or **ELF HTX 976+** racing lubricants to get the best out of the engine



ELF E90R-2G



NO REGULATION

4-STROKE

ATMO & TURBO

- QUALITY CONSISTENCY
- HIGH ENERGETIC CONTENT

OXYGEN CONTENT 32.00% m/m
RON > 108.0
MON > 89.0



ELF E90R-2G is a product made from 2nd generation renewable ethanol which has the highest level in TOTAL Racing range of unleaded fuels. This ethanol is produced from biomass resources that do not compete with food.

These characteristics give it optimal knock resistance capabilities, an exceptional RON and oxygen content. In order to get the best out of this fuel, it is necessary to optimise the engine mapping.

APPLICATION : Rally, Rally Cross, Rally Raid, Hill Climb, Drift...



Be aware of material compatibility with this type of fuel

RENEWABLE





ELF ATMO VINT



NO REGULATION

4-STROKE

ATMO

- HIGH OCTANE NUMBER
- HIGH COMBUSTION SPEED
- VALVE SEAT PROTECTION

OXYGEN CONTENT 1.60% m/m
RON 104.5
MON 91.7



ELF ATMO VINT is designed for old vehicles with engines previously running on leaded gasoline.

ELF ATMO VINT offers high combustion speed and valve seat protection.

APPLICATION: Old engines previously running on leaded gasoline...



Modern fuel for old fashioned vehicle

ELF AVSP 11 VS



NO REGULATION

2 & 4-STROKE

ATMO & TURBO

- HIGH OCTANE NUMBER
- VALVE SEAT PROTECTION

OXYGEN CONTENT 2.60% m/m
RON > 107.0
MON > 95.0



ELF AVSP 11 VS is an unleaded fuel version inspired by Avgas and also provides valve seat protection.

Thanks to its particularly high octane levels, **ELF AVSP 11 VS** offers excellent knocking resistance. **ELF AVSP 11 VS** optimises the operation of engines previously running on high-octane leaded gasoline such as Avgas.

APPLICATION: Old engines previously running on leaded gasoline...



The perfect substitute to airfield Avgas

ELF C-140



NO REGULATION

4-STROKE

TURBO

➤ HIGH CETANE NUMBER

➤ POWER INCREASE

CETANE NUMBER 68.0
LHV 42.7 MJ/kg
SULPHUR CONTENT < 10 ppm



ELF C-140 is recommended for top-performance use on account of its particularly high cetane number.

To get the most of this product, engine mapping and compression ratios must be optimized to profit from the high cetane number.

APPLICATION: Truck racing, Sprint & Endurance, Touring & Sport cars, Tractor pulling...



Used in Off Road Racing championships



ELF GRT3



COMPLIANT WITH 2022 FIA APPENDIX J

4-STROKE

TURBO

- MAXIMUM PERFORMANCE
- HIGH RELIABILITY
- 100% RENEWABLE MATERIAL

CETANE NUMBER **59.0**
LHV 37.4 MJ/kg
SULPHUR CONTENT < **10 ppm**



ELF GRT3 biodiesel is the result of ELF's know-how in truck and endurance racing.

To get full benefit from this product, engine mapping and compression ratios must be optimized to profit from the high cetane number.

APPLICATION: Truck racing, Sprint, Endurance, Touring cars...



Used by top teams in european championships

RENEWABLE



PRODUCT GUIDE

RACING FUELS



Our formula use pure bases to guarantee naturally stable, long-lasting properties, consistent from one production batch to another. This search for constant and optimum quality ensures you obtain first class performance, in conformity with racing requirements.

ENGINE TYPE	REGULATION	RACING FUEL	COMMENTS	
TURBO	2022 FIA Appendix J	<u>ELF TURBO REF</u>	<u>Turbo reference (FIA)</u>	
		<u>EXCELLIUM RALLY</u>	<u>Rally reference (FIA)</u>	
		<u>ELF RACE 102 J</u>	<u>Acces</u>	
		<u>ELF CORE 50</u>	<u>Multipurpose</u>	
	No regulation	<u>ELF PERFO 105</u>	<u>Turbo reference (NO FIA), high octane</u>	
		<u>ELF PERFO 100</u>	<u>0% oxygen</u>	
		<u>ELF E90R-2G</u>	<u>Racing E85</u>	
		<u>ELF RACE 102</u>	<u>Multipurpose access</u>	
ATMO	2022 FIA Appendix J	<u>ELF CORE 50</u>	<u>Multipurpose</u>	
		<u>ELF RACE 102 J</u>	<u>Acces</u>	
		<u>EXCELLIUM RALLY</u>	<u>Rally reference</u>	
	FIM	<u>ELF 4S FIM EVOX</u>	<u>Moto reference (FIM)</u>	
		<u>ELF MOTO2 FIM</u>	<u>Access</u>	
		<u>ELF MITS 46</u>	<u>Fine-tuning / 2-stoke</u>	
	No regulation	<u>ELF ATMO MAX</u>	<u>Atmo reference (NO FIA / NO FIM)</u>	
		<u>ELF E90R-2G</u>	<u>Racing E85</u>	
		<u>ELF RACE 102</u>	<u>Multipurpose access</u>	
		<u>ELF ATMO VINT</u>	<u>Adapted to engines using leaded gasoline</u>	
2-STROKE	2022 FIA Appendix J	<u>ELF CORE 50</u>	<u>Multipurpose</u>	
		<u>ELF RACE 102 J</u>	<u>Acces</u>	
	FIM	<u>ELF MOTO2 FIM</u>	<u>Access</u>	
		<u>ELF MITS 46</u>	<u>Fine-tuning</u>	
	No regulation	<u>ELF RACE 102</u>	<u>Multipurpose access</u>	
		<u>ELF AVSP 11 VS</u>	<u>Adapted to engines using leaded gasoline</u>	
	CONTROL FUEL	2022 FIA Appendix J	<u>ELF CORE 50</u>	<u>Multipurpose</u>
	HISTORIC FUELS	No regulation	<u>ELF ATMO VINT</u>	<u>Adapted to engines using leaded gasoline</u>
			<u>ELF AVSP 11 VS</u>	<u>Adapted to engines using leaded gasoline</u>
DIESEL	2022 FIA Appendix J	<u>GRT3</u>	<u>Racing diesel (FIA)</u>	
	No regulation	<u>C-140</u>	<u>Racing diesel (high cetane)</u>	



RACING

LUBRICANTS

PRODUCT RANGE

RACING LUBRICANTS

ELF's Lubricants : Engineering and passion into motorsport

With its rich experience in fluid engineering, Elf Racing offers you a range of products specially developed for racing vehicles.

ENGINE	AUTO	MOTO	KARTING	4-STROKE	2-STROKE	PAGE
ELF HTX 830 0W-30	•			•		37
ELF HTX 840 0W-40	•			•		37
ELF HTX 850 5W-50	•	•		•		37
ELF HTX 860 10W-60	•	•		•		37
ELF HTX 3820 0W-20		•		•		39
ELF HTX 3830 0W-30		•		•		39
ELF HTX 3835 5W-30		•		•		39
ELF HTX 909 SAE 50		•	•		•	41
ELF HTX 976+ SAE 50		•	•		•	41

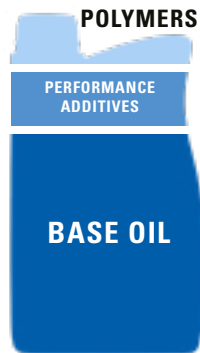
TRANSMISSION	COMMENTS	PAGE
ELF HTX 725 75W-80	Manual or sequential gearbox, with or without differential - Low viscosity - LSD	42
ELF HTX 735+ 75W-90	Manual or sequential gearbox, TB & Axle, suitable for LSD	43
ELF HTX 740 75W	Gearbox - Very low viscosity - Wet Clutch	43
ELF HTX 755 80W-140	Manual or sequential gearbox, Dogbox, TB & Axle - High viscosity - LSD	43

TECHNICAL FLUID	COMMENTS	PAGE
HTX 320 DOT 4	Brake fluid	44
HTX COOLANT CI	Corrosion inhibitor	44

RACING ENGINE LUBRICANTS

4-STROKE

ELF HTX lubricants provides optimum engine protection and performances thanks to the combination of advanced chemical components carefully selected after years of experience in developing successful racing products. **ELF HTX** lubricants are validated through severe engine testing in partnership with experienced racing organizations and teams.



LUBRICATION

- To reduce friction
- To reduce consumption and increase performance



CLEANING

- To eliminate deposits on surfaces and contaminating particles.



COOLING

- To extract heat

ELF HTX lubricants are designed using only base oils from API groups IV and V produced by controlled synthetic chemistry. Unlike a mineral or semi-synthetic lubricant, full synthetic engine oil provides improved engine operation under high load conditions thanks to improved thermal resistance, oxidation stability and enhanced heat transfer.

The polymers used in **ELF HTX** lubricants are specially designed to optimize oil film thickness within lubricated contacts in order to reduce friction losses and to maintain engine reliability.

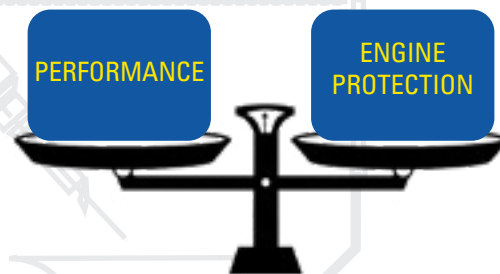


WHICH VISCOSITY GRADE SHOULD YOU CHOOSE ?

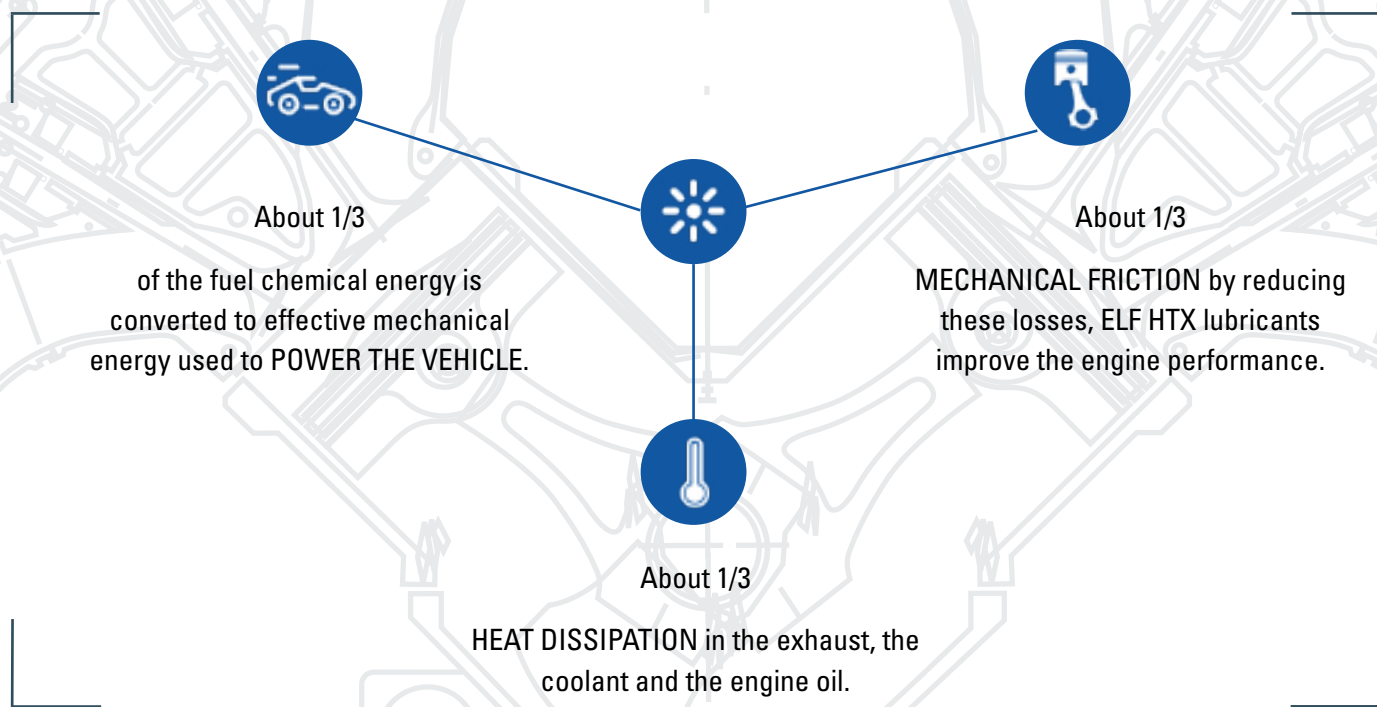
It is recommended to follow the engine manufacturer specification for the high temperature grade. Using a higher viscosity grade than recommended by the manufacturer will improve engine protection but may also reduce oil flow in the engine and increase fuel consumption.

Using a lower viscosity grade than recommended by the manufacturer will reduce friction losses but might also increase the risk of wear in specific area of the engine (bearing, cylinder, rings, oil pump).

Caution : it may reduce oil pressure.



HOW IS THE ENERGY DISTRIBUTED IN A TYPICAL RACING ENGINE ?



ELF HTX 4-STROKE ENGINE RANGE FOR CARS



100% SYNTHETIC



The **ELF HTX** 8xx range is designed for 4-stroke naturally aspirated or turbocharged, direct or indirect injection engine applications.

- Synthetic product formulated to bring a gain in efficiency specifically under very high load and up to very high rpm.
- Optimised adaptation to protect metal areas subject to very high pressure gradients such as tappets, cams...
- Specific dispersivity adapted to local temperature extremes to avoid the formation of deposits, especially in the lubrication circuit.
- Enhanced shear strength to ensure optimum reliability under extreme stress.
- Improved de-aeration to ensure oil film reliability in all engine sump types (wet or dry).



ELF HTX 830 0W-30



PERFORMANCE ●●●●●●
ENGINE PROTECTION ●●●●○○

ELF HTX 830 is an uncompromising, performance-oriented product. Used for qualification phases and for short and medium duration events

Type: Circuit (used in particular in GT4), Hillclimb, Rally, Drift...

ELF HTX 840 0W-40



PERFORMANCE ●●●●●○
ENGINE PROTECTION ●●●●●○

ELF HTX 840 is a perfect compromise between performance and protection. Used for multiple Teams:

Endurance (used in particular in WEC), Circuit, Hill Climb, Rally...

ELF HTX 850 5W-50



PERFORMANCE ●●●●●○
ENGINE PROTECTION ●●●●●○

ELF HTX 850, thanks to its high viscosity index and grade at high temperatures, is the compromise between protection and performance for medium duration events. Used for multiple race events: Circuit (Used in particular in WRX), Rally, Drift ...

ELF HTX 860 10W-60



PERFORMANCE ●●●●○○
ENGINE PROTECTION ●●●●●●

ELF HTX 860, with its very high viscosity index and grade at high temperatures, is the choice for maximum protection. This lubricant is particularly used for vintage racing engines, on one-design series seeking maximum reliability or for race events in hot countries. Used for multiple race events: Endurance (GT, Historic), Circuit (Used in particular F2/F3), Rally, Rally-raid, Drift...

ELF HTX 4-STROKE ENGINE RANGE FOR BIKES

100% SYNTHETIC



The **ELF HTX 850 and HTX 38xx** product range is specifically designed for wet clutch motorbike applications with combined engine and transmission. They are synthetic products formulated to provide maximum efficiency specifically under very high load and up to very high rpm. The friction coefficients have been reworked to give your clutch the robustness adapted to racing use. The extreme pressure levels are adapted to the constraints in the transmission and engine parts subject to very high pressure gradients such as pinions, tappets, cams...

Dispersivity is increased to cope with local temperature extremes in order to avoid the formation of deposits, particularly in the lubrication circuit and the "dead" zone of the transmission. Shear strength is also optimised to ensure optimum reliability under extreme stress. De-aeration is improved in each variant to ensure oil film reliability.



ELF HTX 850 5W-50



PERFORMANCE



ENGINE PROTECTION



This ELF HTX 850 product is designed for 4-stroke naturally aspirated or turbocharged, direct or indirect injection engine applications.

Synthetic product formulated to bring a gain in efficiency specifically under very high load and up to very high speed, by reducing friction and overheating.

ELF HTX 850, thanks to its high viscosity index and hot grade, is the compromise between protection and performance for medium duration tests.

ELF HTX 3820 0W-20



PERFORMANCE ● ● ● ● ● ●
ENGINE PROTECTION ● ● ● ● ○ ○

ELF HTX 3820 is an uncompromising, performance-oriented product for engines capable of reaching more than 19,000 rpm. It is used for qualification phases and for short and medium duration races. Based on ELF's experience in racing, **ELF HTX 3820** is used to maximise the performance of engines in Moto GP, WSBK and Supersport.



ELF HTX 3830 0W-30

PERFORMANCE ● ● ● ● ● ○
ENGINE PROTECTION ● ● ● ● ● ○

ELF HTX 3830 is an uncompromising, performance-oriented product for engines capable of reaching more than 19,000 rpm. It is used for qualification phases and for short and medium duration race events. Based on ELF's experience in racing, **ELF HTX 3830** is used to maximise the performance of engines in Moto GP, WSBK and Supersport.



ELF HTX 3835 5W-30

PERFORMANCE ● ● ● ● ○ ○
ENGINE PROTECTION ● ● ● ● ● ●

ELF HTX 3835 5W30 is an uncompromising performance-oriented product for engines capable of reaching more than 19,000 rpm. It is used for short duration races up to endurance races. Based on ELF's racing experience, **ELF HTX 3835** is used to maximise the performance of engines in Moto GP, EWC, WSBK, Supersport and Superstock.



ELF HTX 860 10W-60

PERFORMANCE ● ● ● ● ○ ○
ENGINE PROTECTION ● ● ● ● ● ●

This ELF HTX 860 product is designed for naturally aspirated or turbocharged, direct injection, indirect injection or carburetor 4-stroke engine applications. ELF HTX 860, thanks to its very high viscosity index and hot grade, is the choice for maximum protection.

This lubricant is particularly used for vintage competition engines, on one-design series seeking maximum reliability or for events in hot countries.



ELF HTX 2-STROKE ENGINE RANGE FOR 2-STROKE



100% SYNTHETIC & CASTOR



The **ELF HTX 9xx** 2-stroke range has remarkable thermal stability and antioxidant properties. These lubricants are specially developed for 2-stroke racing engines used in combination with leaded or unleaded fuel. They offer exceptional resistance to very high operating temperatures and are perfectly compatible with ELF racing fuels.

These products have become a reference in the world of Karting and other 2-stroke racing applications! The perfect match with ELF racing fuels.

ELF HTX 909 SAE 50



PERFORMANCE ●●●●●●
ENGINE PROTECTION ●●●●●○

SYNTHETIC WITH RICIN

Based on castor oil and synthetic oil, **ELF HTX 909** provides exceptional protection for Karts and Motocross racing engine. It is recommended for engines running at very high speeds, up to 25,000 rpm. Prevents ring sticking, Piston/SparkPlug fouling, providing engine with optimized power availability. CIK-FIA 2021 approval. ELF HTX 909 is homologated by IAME.



ELF HTX 976+ SAE 50

PERFORMANCE ●●●●●○
ENGINE PROTECTION ●●●●●●

100% SYNTHETIC

ELF HTX 976+ provides exceptional protection against gripping sizing and Knocking. It is specially developed for racing engines running between 12,000 and 17,000 rpm. Its low ash content and special chemical prevents the formation of deposits in the combustion chamber, thus reducing all risks of damage. Prevents ring sticking, piston and spark plug fouling while providing your motorbike or kart with optimized power availability. CIK-FIA 2021 approval..

ELF HTX TRANSMISSION DRIVELINE RANGE



100% SYNTHETIC



ELF HTX 7xx Lubricant range is specifically designed for racing transmission applications. These high-tech products are formulated to provide maximum efficiency gains specifically under very high loads, temperatures and up to very high speeds. They provide protection and consistent optimum performance through a combination of carefully selected chemical components.



ELF HTX 725 75W-80

PERFORMANCE
TRANSMISSION PROTECTION



ELF HTX 725 results directly from our research and development's work carried out in Formula 1. Designed to reduce the power loss into transmission to the minimum, its performance has been proven in F2/F3 as well as Formula Renault's engines. Ideal for gearbox, manual or sequential with or without integrated limited slip differential, coupled with high RPM engines.

ELF HTX 735+ 75W-90



PERFORMANCE
TRANSMISSION PROTECTION



ELF HTX 735 is an excellent compromise between performance and reliability, making it easy and quick to shift gears up for an unrivalled driving experience for short or long duration runs. Its properties make this oil suitable for all types of gearboxes, transfer box and limited slip differentials or not that require a 75W-90 lubricant that meets the API GL-4 or GL-5 specification.



ELF HTX 740 75W

PERFORMANCE
TRANSMISSION PROTECTION



ELF HTX 740 ensures ultra-quick speed changes under extreme conditions with high RPM. This reference is ideally suited to engines with separate transmissions, whether in a kart or motorbike gearbox. An ultra fluid monograde formulation designed to maximise transmission efficiency through enhanced friction modifiers and optimised deaeration.



ELF HTX 750 75W-140

PERFORMANCE
TRANSMISSION PROTECTION



ELF HTX 740 ensures ultra-quick speed changes under extreme conditions with high RPM. This reference is ideally suited to engines with separate transmissions, whether in a kart or motorbike gearbox. An ultra fluid monograde formulation designed to maximise transmission efficiency through enhanced friction modifiers and optimised deaeration.



ELF HTX 755 80W-140

PERFORMANCE
TRANSMISSION PROTECTION



ELF HTX 755 is recommended for lubricating manual or sequential gearbox, dogbox, transfer box, limited slip differential or not and hypoid axle for long duration runs. Gets outstanding performances and best protection, especially for high torque applications.

HTX AUXILIARY AUXILIARY RANGE

FLUIDS



HTX 320 DOT 4

- EXTREME TEMPERATURE
- DRY BOILING POINT : 328°C

100% SYNTHETIC



BRAKE FLUID

ELF HTX 320 is a 100% synthetic brake product based on ester glycol technology. It features a particularly high boiling point (>320°C) with increased resistance to oxidation. It is compatible with all types of elastomer used in braking systems and is designed not to retain air humidity.

ELF HTX 320 is specially formulated to provide the best performance in the most demanding conditions encountered in racing.

HTX COOLANT CI

- INCREASED HEAT EXCHANGES
- ANTI-CORROSION PROTECTION AND ANTI-CAVITATION
- NO DEPOSIT FORMATION
- BETTER STABILITY IN TIME

100% SYNTHETIC









COOLANT / CONCENTRATE

ELF HTX COOLANT CI is the direct result of our research and development work carried out in Formula 1. **ELF HTX COOLANT CI** (Corrosion Inhibitor) have to be diluted in distilled water (10%). It is designed to lower the engine temperature and provide optimum protection against corrosion and cavitation in your engine's cooling system. It meets the most extreme requirements of motorsport.

PRODUCT GUIDE

RACING LUBRICANTS

CATEGORY		THE RANGE		
4-STROKE ENGINE		HTX 830	0W-30	5L
		HTX 840	0W-40	5L
		HTX 850	5W-50	5L
		HTX 860	10W-60	5L
		HTX 3820	0W-20	1L
		HTX 3830	0W-30	1L
		HTX 860	10W-60	5L
		HTX 850	5W-50	5L
		HTX 3835	5W-30	1L
		2-STROKE ENGINE		HTX 909
HTX 976+	SAE 50			1L
TRANSMISSION		HTX 725	75W-80	5L
		HTX 735+	75W-90	5L
		HTX 740	75W	1L
		HTX 755	80W-140	5L
BRAKE FLUID		HTX 320	DOT 4	0,5L
COOLANT		HTX COOLANT CI	Organic corrosion inhibitor	5L

CUSTOMER OIL SERVICE

WHAT IS CUSTOMER OIL SERVICE ?

Is a comprehensive and customised diagnostic system for engines, gearboxes and other mechanical components lubricated by a closed oil circuit

Customer Oil Services is recommended in the following cases:

- Detailed monitoring of the lubricant's behaviour in service
- Detailed monitoring of the wear of the component over its life cycle.
- Punctual diagnosis in certain particular cases (breakage, complaint, expertise, ...).
- Analysis of the conformity of the new lubricant.

WEAR AND
TEAR ON
MECHANICAL
PARTS

LUBRICANT
CONTAMINATION

MEASURED CHARACTERISTICS

CHARACTERISTICS
OF THE LUBRICANT

OPTIONS...



MY ELF STORE

Find at Myelfstore a collection of authentic clothing that retraces the greatest successes of drivers and emblematic competitions!



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COLLECTION OFFICIELLE

HTX CLASSIC



HTX PRESTIGE 20W-50

Mineral technology
engine oil API SF

Suitable for old and
young classic cars.



HTX CHRONO 10W-60

Synthetic technology
engine oil API SL

Suitable for old and
young racing classic
cars. For drivers willing
to go on circuits.



HTX PRESTIGE SAE 40

Mineral technology
engine oil API SB

Suitable for old and
young classic cars.



HTX COLLECTION 20W-50

Mineral technology
engine oil API SL

Suitable for old and
young classic cars.

FIND A RESELLER



GUARANTEED PRODUCT, SUPPLY
AND SERVICE QUALITY



9001:2015

14001:2015

45001:2018

[BECOME A RESELLER](#)



**TOTAL ADDITIVES
AND FUELS SOLUTIONS**
HEAD OFFICE








RACING & **Fuels & Lubricants**
INTERNATIONAL PRODUCT GUIDE

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