

# **TECHNICAL DATA SHEET**

"Our ELF HTX formula uses innovative oil bases to guarantee extreme performances, long-lasting properties, ensuring the best engineering for your engine. This research for constant and optimum quality is the pillar of our philosophy, in conformity with racing requirements."

#### **USES**

**ELF HTX 840** is a multigrade lubricant specially developed for 4-stroke petrol engines.

**ELF HTX 840** is designed for engine performance in runs of all. It is the excellent compromise between engine performance and protection. Due to its level of viscosity when hot (W-40), **ELF HTX 840** reduces wear on moving mechanical parts.

**ELF HTX 840** is used for the following applications:

• 4-stroke naturally-aspirated and turbocharged petrol engines

**ELF HTX 840** is perfectly suited for competitions of short and average length:

- Circuit
- Hill climb
- Rallv
- Endurance (Used in the WEC Championship)
- ..

## **PROPERTIES**

	Units	Typical data	Method
Density at 15°C	g/ml	0.8517	NF EN ISO 12185
Viscosity at 40°C	mm²/s	74.88	ASTM D-445
Viscosity at 100°C	mm²/s	13.28	ASTM D-445
Viscosity HTHS	mPa.s	3.66	CEC L-036
Flash point	°C	242	NF EN ISO 2592

# ELF HTX 840 Vs HTX 8xx SERIES

**ELF HTX 840** is miscible in any proportion with the whole 4-stroke engines lubricants ranges **ELF HTX 8xx** and **ELF HTX 38xx**.

In the ELF HTX 8xx range, ELF HTX 840 is a performance-geared lubricant.

If the user is planning to introduce harsher conditions of use, we **recommend ELF HTX 840 (0W-40)** for greater reliability. For even more significant power gains for short and/or very short runs, we recommend the **ELF HTX 830 (0W-30)**.





## **CHARACTERISTICS**

CHARACTERISTICS	$\rightarrow$	TECHNICAL ADVANTAGES	$\rightarrow$	ENGINE BENEFITS
Specific oil gradation (0W-40)	$\rightarrow$	Excellent cold fluidity, high protection of lubricated components even in hot environments	$\rightarrow$	Mechanical performance and protection in all atmospheric thermal conditions
<b>Optimized</b> R&D formulation	$\rightarrow$	Contains performance additives with a greater selection and carefully studied dosages compared to lubricants traditionally distributed on the market	$\rightarrow$	Superior lubrication, cleaning, cooling of engine components and compatibility with elastomers to ensure reliability during racing events
Selection of superior frictional modifiers	$\rightarrow$	Increase engine efficiency by reducing mechanical losses (rings, pistons, jacket area, cams, and oil pump)	$\rightarrow$	Maximization of the mechanical power available from the engine for the best performances
<b>Detergency</b> additives	$\rightarrow$	Removal of carbon deposits and maintenance of the structural-functional properties of the engine components especially in extreme use	$\rightarrow$	A cleaner engine, reduced surface wear, maximization of engine's performance and reliability
Anti-wear additives	$\rightarrow$	Adsorption on metal areas subject to very high pressure like tappets, cams and bearings	$\rightarrow$	Greater engine protection with impeccable reliability
<b>Dispersant</b> additive	$\rightarrow$	Avoids agglomeration of particles, <b>reduction of wear</b> of the lubrication circuit	$\rightarrow$	Reduced clogging of filters and avoids sludge formation in cold parts of the engine
100% synthetic composition	$\rightarrow$	Better reliability thanks to the precise control of chemical formulation, extended thermal range	$\rightarrow$	Higher and reliable performances in extreme thermal conditions





## **RECOMMENDATIONS**

ELF HTX 840 works perfectly up to 13,000 rpm.

ELF HTX 840 is compatibility with the materials of the lubrication circuit:

- No known incompatibility to date
- Compatible silicon, fluorine, acrylic and nitrile type joints

There is no specific precaution to take on first use of **ELF HTX 840** other than removing the previous lubricant and replacing the oil filter.

The use of an external additives (like engine remetalling) is not recommended. Viscosity grade to be adapted by engine tuner. ELF HTX technology is compatible with all synthetic lubricants PAO and ester type.

The drain oil spacing criteria depend according to your use and required performance. Contact us for more technical information: <a href="mailto:afs-information@totalenergies.com">afs-information@totalenergies.com</a>

#### **STORAGE**

To preserve its original properties, **ELF HTX 840** must be handled and stored away from extreme weather conditions. The can must be carefully closed again after each use.

#### **GLOSSARY**

For any further information relative to the technical aspects written in our Data Sheets, a glossary is online on our website <u>additives-fuels.totalenergies.com</u>, racing fuels and lubricants section.

