STIHL operating fluids

For people, machines and the environment
The STIHL Optimum System

Quality drives us forward: STIHL develops and tests the lubricants and fuels for its machines itself – in its own STIHL laboratory, at over 100 test stations and in field tests with a range of applications.

Chemists, engineers and users work hand in hand at STIHL. That’s the only way to utilise the full range of essential skills in order to achieve optimum results – for people, machines and the environment.

Chemists, engineers, users: triple the amount of expertise ensures quality, safety and performance.

Everything from a single source

STIHL development
In the state-of-the-art development centre with its own laboratory, STIHL employs over 500 people.

STIHL testing facilities
STIHL equipment undergoes extensive functional and endurance testing at over 100 test stations.

STIHL practical test
In field tests, STIHL products are tested under a range of different operating conditions.
Focussing on people: Whether the tank is being filled or the engine is running – you’re always well equipped with STIHL operating fluids, such as STIHL MotoMix fuel mixture.

- **Safe to use**: the fumes are practically free of substances such as olefins and aromatic hydrocarbons (e.g. benzene)
- **Clean burning**: due to highly pure raw materials
- **Practical to use**: this ready-to-use mixture can be kept for up to 5 years in suitable storage conditions* 

* in technically approved containers with an airtight seal. In dry, dark storage conditions at a room temperature of max. 20°C.

It’s all in the mix: STIHL MotoMix, premixed with STIHL HP Ultra premium premium oil, provides long-lasting engine protection.

- **Best engine lubrication**: thanks to high-quality synthetic oils
- **Superior cleanliness**: due to virtually deposit-free burning
- **Very engine-friendly**: maximum compatibility with all of the materials and components in STIHL machines

A recipe for success: maximum engine service life with few maintenance requirements and reduced costs.

Without STIHL HP Ultra* 

The piston can become dirty on the edge and rings.

* e.g. with a conventional two-stroke engine oil of performance class API-TC

With STIHL HP Ultra, the piston looks almost as good as new even after several hundred hours of operation.
Clean operations: Not only are STIHL operating fluids extremely powerful, they have also been proven not to harm the climate or ground water.

- Reduced emissions: low CO2 emissions thanks to highly pure raw materials
- Biodegradable: STIHL HP Ultra is over 80% biodegradable within 21 days
- Low environmental pollution: for example, STIHL HP Ultra is in the lowest water hazard class

Greater environmental protection: this is the goal STIHL chemists and engineers set themselves with every product they develop.

From 0 to 100: The patented* STIHL MotoMix fuel formula allows STIHL engines to deliver full power.

- Excellent starting performance: the patented formulation (EP 2031043) helps to ensure a reliable start
- Optimum acceleration: covers the entire speed range quickly and powerfully
- Flawless operation: even with a sudden gas exchange

Optimum coordination: STIHL operating fluids are perfectly adapted to the performance requirements of STIHL machines.

* in selected European countries
In-house development expertise: As one of the largest manufacturers of handheld power tools, STIHL is an expert when it comes to small engines. It therefore makes sense for STIHL to develop the operating fluids for its machines itself.

- Well equipped: STIHL employs over 500 people in a state-of-the-art development centre with its own laboratory.

- Specialist expertise is not enough on its own: At STIHL, chemists, engineers and users work closely together to get the very best out of the engines.

Ready for a test of strength: Any manufacturer hoping to deliver flawless quality needs to subject its products to stringent testing. STIHL machines and operating fluids undergo comprehensive endurance tests before they appear on the market.

- STIHL equipment and operating fluids are subjected to thorough functional and endurance testing at over 100 test stations – in some cases continually, right around the clock.

- All of the test results are directly incorporated into further product development. STIHL continues to refine the products until optimum quality is achieved.
An outstanding result

Triple checked for better operation: Chemical, mechanical and practical – this is the basis on which STIHL operating fluids are developed, tested and optimally adapted to STIHL equipment. The result: total satisfaction on every level.

- **Health**: Low-emission burning and fumes mean the products are not harmful to use
- **Performance**: Excellent engine power with minimal wear and significantly less maintenance
- **Environment**: Biodegradable and with a low level of harmful substances in the exhaust fumes, thus benefitting the climate

Optimum quality for your equipment

- **MotoMix**: Premixed fuel (1:50) for all STIHL engines
- **HP Ultra**: Fully synthetic two-stroke engine oil
- **SynthPlus**: Semi-synthetic chainsaw oil protects against wear
- **Superclean**: Solvent and lubricant
- **Varioclean**: Special cleaner
- **Multispray**: Multifunction oil
- **Multilub**: Multipurpose grease for all STIHL hedge trimmers and electric saw gears

STIHL OPTIMUM SYSTEM

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We know what engines need: Thanks to its exceptional expertise in engines and operating fluids, STIHL achieves optimum results for people, machines and the environment when developing its oils, lubricants and fuels. In practice, this means reliable operation, outstanding performance with minimal wear and low-emission burning.

For further information and advice: www.stihl.com