

# STIHL®

STIHL operating fluids

## For people, machines and the environment



# The STIHL Optimum System

# Everything from a single source



**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.

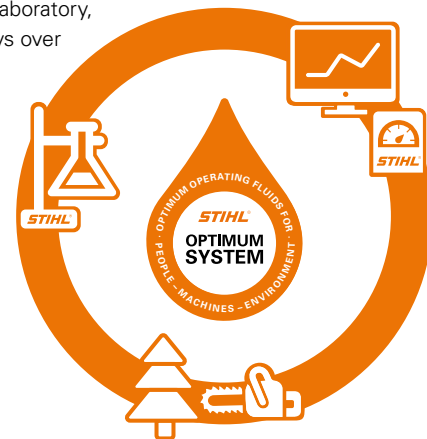
Chemists, engineers and users work hand in hand at STIHL. That's the only way to utilise the full range of essential skills in order to achieve optimum results – for people, machines and the environment.

## 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.



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

## Beneficial handling



**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.

## Optimum protection for your machine

**It's all in the mix:** STIHL MotoMix, premixed with STIHL HP Ultra 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



**With STIHL HP Ultra, the piston looks almost as good as new even after several hundred hours of operation.**

## Performance you can feel



**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

## Figures that benefit the environment

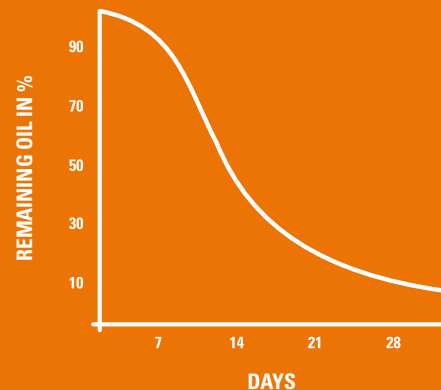
**Clean operations:** Not only are STIHL operating fluids extremely powerful, they have also been proven not to harm the climate or ground water.

- **Reduced emissions:** low CO<sub>2</sub> 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.

### BIODEGRADATION



## Developed from the ground up

**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.



## Quality put to the test



**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

# STIHL operating fluids

**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

	 Health	 Performance	 Environment
			

# Reliable, strong and clean



0461-001 0100 M3 A6 S0116 X Printed in Germany  
© ANDREAS STIHL AG & Co. KG, 2016. Environmentally friendly,  
chlorine-free bleached paper.

**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.