


02/2025

**ROWE**<sup>®</sup>



**SUSTAINABLE  
LUBRICANTS  
FOR INDUSTRY**

HIGHTEC MADE IN GERMANY

[www.rowe-oil.com](http://www.rowe-oil.com)

# PERFORMANCE AND SUSTAINABILITY COMBINED

Discover our revolutionary lubricants that not only enhance your machines' performance but also contribute significantly to sustainability. With our innovative products, we offer you the perfect solution for maximum efficiency and environmental protection.

## Highest performance for your machines

Our lubricants are the result of years of research and development. They feature exceptional lubricating and protective properties that extend your machines' service life and reduce maintenance costs. Furthermore, many of our sustainable lubricants are certified according to the requirements of **FDA H1**, which means that they are confirmed to be food grade.

Experience:

- **Optimized performance:** minimal friction and maximum protection so your machines run smoothly and efficiently.
- **Longer service life:** reduced wear and corrosion to extend the service life of your devices.
- **Cost efficiency:** lower maintenance requirements and less wear mean savings in the long run.
- **Food-grade safety:** our products are **H1** certified, meaning they are suitable for use in areas where they may come into contact with food.



## METALWORKING FLUIDS

Our cutting and forming oils offer exceptional lubrication and EP performance. Friction and wear are reduced, surface quality improved and tool service life extended. In applications like turning, milling, drilling, punching and deep-drawing, they ensure precise, efficient machining – even at high temperatures and under intense loads. Ideal for challenging machining processes.



## HYDRAULIC OILS

In hydraulic systems, our hydraulic oils ensure efficient and reliable power transmission. They offer excellent protection from wear and corrosion and guarantee stable performance over a wide temperature range. Their excellent viscosity and lubricity help to reduce friction and energy losses, thereby extending the service life of machine components. Ideal for use in construction and agricultural machinery and in industrial applications.

HYDRAULIC OILS

METALWORKING  
FLUIDS



## INDUSTRIAL GEAR OILS

Our Industrial gear oils offer first-class protection for machines and ensure trouble-free operation. They reduce friction, minimize wear, and extend the service life of transmissions and components exposed to high loads and stresses. Thanks to their outstanding oxidation stability and excellent lubrication properties, they guarantee reliable performance under extreme conditions. Ideal for use in a variety of industrial applications.

## GREASES

ROWE industrial greases offer reliable protection from wear and corrosion and ensure sustained lubrication under challenging conditions. They reduce friction and optimize the performance of machine components, even under high loads and temperatures. With their excellent water resistance properties and stable consistency, they guarantee reliable functionality in a wide range of industrial applications. Ideal for transmissions, bearings and other moving parts.

## SAW CHAIN OILS

Our saw chain oils ensure optimum lubrication and extend the service life of chainsaws and guide rails. They offer outstanding wear protection and reduce friction, even under high loads. Thanks to their excellent adhesion, they remain reliably in situ, even with intensive use. Ideal for forestry machinery and challenging cutting tasks.

INDUSTRIAL  
GEAR OILS



GREASES



SAW CHAIN OILS



# INNOVATIVE LUBRICANTS SUSTAINABLE FUTURE

By using our lubricants, you'll profit not only from first-rate performance and cost efficiency, but also from the safety and reliability required for food processing.

## Sustainability in focus

Our lubricants are more compatible with the environment than conventional mineral oil-based products. We use sustainable raw materials and rely on resource-friendly manufacturing processes to minimize our ecological footprint. Many of our products are certified under the **EU Ecolabel**, confirming their environmental friendliness and sustainability. You benefit from:

- **Biodegradable:** our products are formulated to decompose in the environment better than mineral oil-based lubricants, which results in less harmful residue accumulating.
- **Resource-friendly:** by using renewable raw materials and energy-efficient production methods, we reduce consumption of resources and, in turn, environmental impact.
- **Lower emissions:** thanks to the use of renewable raw materials, our formulas help to reduce CO<sub>2</sub> emissions and thus to improve the air quality in comparison to mineral oil-based products.

# MINERAL OIL-FREE ALTERNATIVES FOR LESS IMPACT

## Compare: sustainable lubricants vs. classic mineral oil-based products

In comparison to conventional mineral oil-based lubricants, our sustainable alternatives that have been awarded the **EU Ecolabel** offer several advantages:

- **Less environmental impact:** mineral oil-based lubricants often leave behind residues that are harmful to the environment. Our sustainable products are biodegradable and thus have less of an impact on the environment.
- **Renewable raw materials:** classic lubricants are based on limited fossil resources. Our sustainable lubricants use renewable raw materials, which lowers the consumption of non-renewable resources.
- **Fewer harmful substances:** while mineral oil-based lubricants often contain critical substances that can pollute soil and water, our products are formulated to contain fewer harmful ingredients and thus help to reduce environmental impact.

By using our sustainable, **EU Ecolabel**-certified lubricants, you make a positive contribution to reducing environmental impact in comparison to conventional products, while also benefiting from advanced technology.

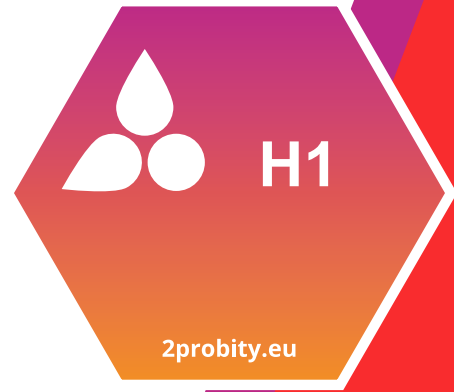


# WHAT IS THE 2PROBITY H1 LABEL?

**H1 is the term for lubricants that are suitable for use where incidental contact with food may occur.**

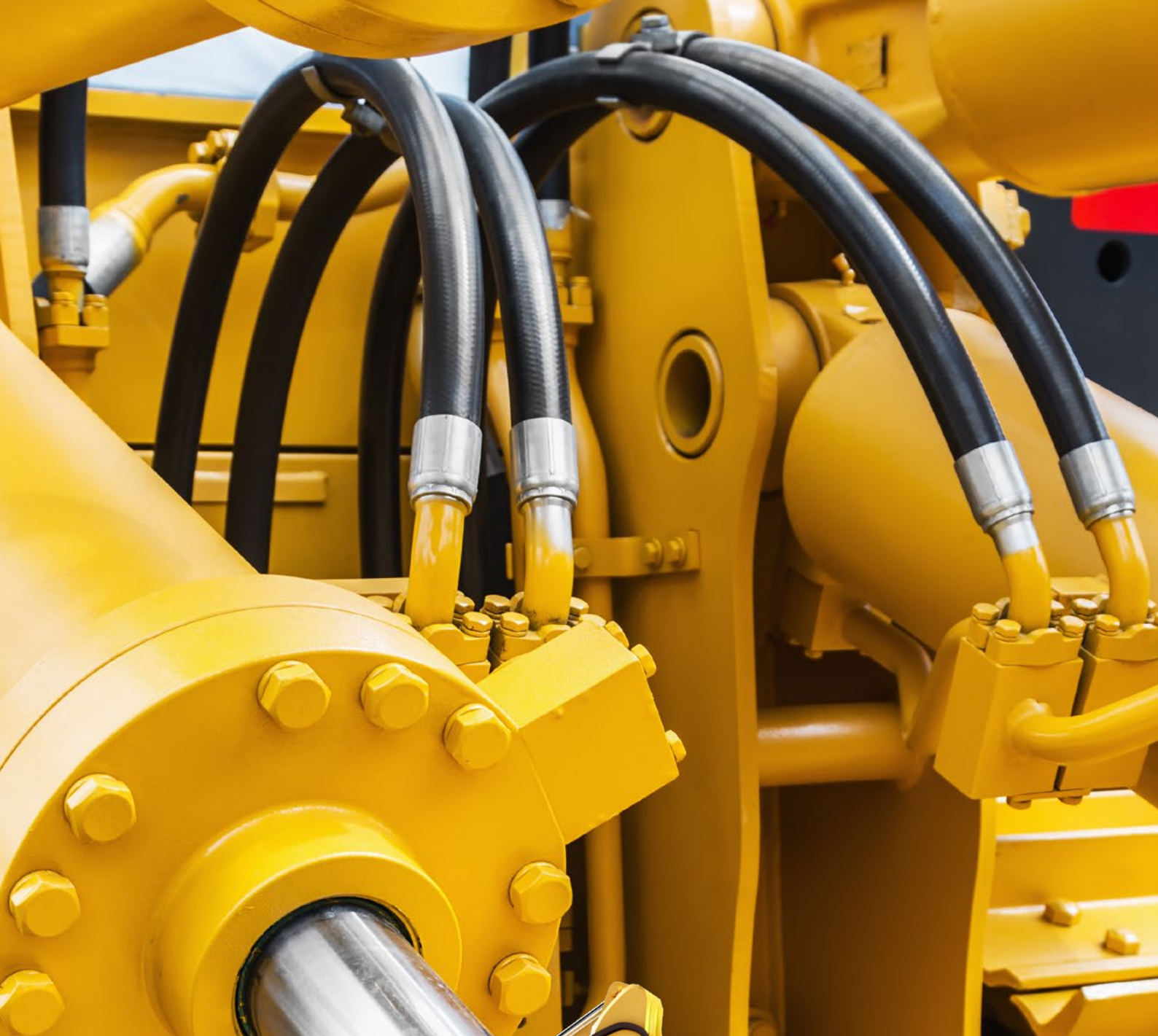
The requirement fits the HACCP plan for food safety with maximum incidental levels of lubricant presence in the foodstuff, as defined by the FDA (US Food & Drug Administration).

To summarize, H1 lubricants are known worldwide as special lubricants for incidental contact with foodstuffs and are recommended for the lubrication of machines used in the production of food, animal feed and pharmaceuticals. A list of ROWE lubricants with H1 certification can be found at [www.2probity.eu](http://www.2probity.eu).



# WHAT IS THE EU ECOLABEL?

The EU ECOLABEL is the EU environmental mark recognized by all member states of the European Union as well as by Norway, Liechtenstein and Iceland. The voluntary label, which was launched in 1992 via an EU regulation (Regulation EEC 880/92), has gradually become a go-to reference for consumers wishing to reduce their environmental impact by purchasing more environmentally friendly products and services.



**RAISE  
THE  
LIMIT**



Property	Method	Unit
Density at 15 °C	ASTM D-7042	g/ml
Viscosity index	ASTM D-7042	-
KV 40	ASTM D-7042	mm <sup>2</sup> /s
Pour point	ASTM D-97/ DIN EN ISO 3016	°C
Flash point	ASTM D-92/ DIN EN ISO 2592	°C

# HYDRAULIC OILS - HETG, HEPR & HEES

## HIGHTEC SUNLUB® ULTRAINDUSTRY 32, 46 & 68

High-performance industrial hydraulic oils with high energy saving potential, based on renewable raw materials (HETG). H1-certified for use in the food sector.

## HIGHTEC SUNLUB® E 32 & E 46

These products feature fully synthetic zinc and ash-free technology (HEPR). Developed for an extra-long oil service life. Awarded the EU Ecolabel. Based on renewable raw materials.

## HIGHTEC SUNLUB® LONGLIFE 32 & 46

These products feature fully synthetic zinc and ash-free technology (HEPR). Developed for an extra-long oil service life. Awarded the EU Ecolabel.

## HIGHTEC BIO HLP 46 S

Multigrade ester-based hydraulic fluid (HEES), biodegradable (water hazard class (WGK) 1). Thanks to a high viscosity index, the product has excellent multigrade properties.

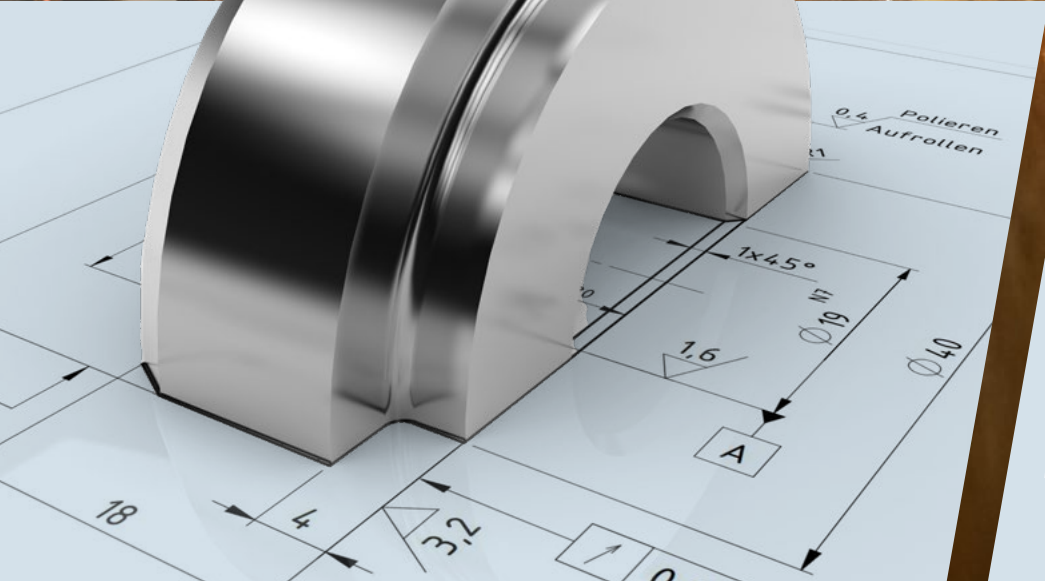
## HIGHTEC SUNLUB® ULTRAMOBIL 46

Sustainable high-performance ester-based hydraulic oil (HEES) for mobile applications.

## HIGHTEC SUNLUB® SYNTH 15 & 46

High-performance hydraulic oil based on saturated synthetic esters, developed for an extra-long oil service life and high system protection. Zinc and ash-free technology based on sustainable raw materials.

<i>HIGHTEC SUNLUB® ULTRAINDUSTRY 32 49305</i>	<i>HIGHTEC SUNLUB® ULTRAINDUSTRY 46 49306</i>	<i>HIGHTEC SUNLUB® ULTRAINDUSTRY 68 49307</i>	<i>HIGHTEC SUNLUB® E 32 49365</i>	<i>HIGHTEC SUNLUB® E 46 49366</i>	<i>HIGHTEC SUNLUB® LONGLIFE 32 49355</i>	<i>HIGHTEC SUNLUB® LONGLIFE 46 49356</i>	<i>HIGHTEC BIO HLP 46 S 30411</i>	<i>HIGHTEC SUNLUB® ULTRAMOBIL 46 49346</i>	<i>HIGHTEC SUNLUB® SYNTH 15 49302</i>	<i>HIGHTEC SUNLUB® SYNTH 46 49906</i>
0.908	0.9215	0.92	0.84	0.84	0.85	0.84	0.912	0.9	0.9038	0.93
> 190	> 190	> 190	147	157	160	190	187	>200	145	150
32	46	68	32	43.8	32	43	46	46	13	47
-20	-15	-10	-40	-40	-46	-40	-36	-38	-60	-46
> 200	> 200	> 200	230	240	> 200	240	> 300	220	220	240



Property	Method	Unit
Density at 15 °C	ASTM D-7042	g/ml
KV 40	ASTM D-7042	mm <sup>2</sup> /s
Biodegradability	ASTM D-97/ DIN EN ISO 3016	OECD 301 B
Flash point	ASTM D-92/ DIN EN ISO 2592	°C



# METALWORKING FLUIDS - CUT, GRIND & FORM

## HIGHTEC SUNLUB® CUT

Non-water-miscible cutting oils from the CUT series have been specially developed for metalworking applications to ensure outstanding lubrication and reliable performance. They offer excellent cooling and lubricating properties, even at high cutting speeds and under intense loads. These oils protect tools from premature wear, improve surface quality and ensure consistent performance. They are ideal for use in challenging machining processes where precision and efficiency are crucial.

## HIGHTEC SUNLUB® GRIND

Our grinding oils deliver excellent lubrication and cooling performance in grinding processes, thereby helping to attain high levels of precision and surface quality. They reduce friction and heat build-up, thus minimizing wear in grinding tools and extending service life. Their optimum viscosity ensures stable performance, even under intensive grinding loads. Ideal for the challenging grinding applications encountered in metalworking, mechanical engineering and precision mechanics, they offer an efficient solution for high-end production processes.

## HIGHTEC SUNLUB® FORM

Forming lubricants of the FORM series ensure excellent lubrication and high-pressure performance in forming processes such as stamping, deep drawing and multi-stage forming. They reduce friction and wear, thereby extending tool life and improving the surface quality of the material. Thanks to their high adhesion and excellent lubricating properties, they deliver reliable performance, even in complex forming processes and under high loads.

HIGHTEC SUNLUB® GRIND 7 ECO 49641	HIGHTEC SUNLUB® CUT 9 49602	HIGHTEC SUNLUB® CUT 22 ECO 49654	HIGHTEC SUNLUB® MF 32-46 ECO 49672	HIGHTEC SUNLUB® CUT MFS 32 ECO 49671	HIGHTEC SUNLUB® FORM 90 ECO 49673	HIGHTEC SUNLUB® FORM 150 ECO 49667	HIGHTEC SUNLUB® FORM SSU 5 ECO 49670	HIGHTEC SUNLUB® FORM 40 ECO 49655	HIGHTEC SUNLUB® FORM NMU 150 ECO 49674	HIGHTEC SUNLUB® FORM NDN 330 ECO 49675
0.861	0.91	0.906	0.834	0.835	0.949	0.93	0.88	0.912	0.986	1.016
6.9	10	22	37	30.95	90	150	5.1	46	158	334
>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>60
200	>200	>220	>220	>220	>220	>260	>200	>220	>260	>250

## Hydraulic oils (HEPR)

### HIGHTEC SUNLUB® E 46 (Art.-No.: 49366)

The product features an ashless, fully synthetic top level technology. Developed for extra extended oil life. Based on renewable raw materials. Awarded by the EU ECOLABEL.



#### Approvals

- » EATON E-FDGN-TB-002-E
- » EATON Brochure 03-401-2010 Rev.1
- » PARKER Denison HF-0, HF-1, HF-2, HF-6e
- » Engel
- » KraussMaffei
- » SS 155434 AAV 46 environmentally acceptable

#### Specifications

- » AIST 126 & 127
- » CINCINNATI MACHINE P70
- » DIN 51 524-3 - HVLP (TOST wet)
- » German Steel SEB 181222
- » ISO 11158 HV
- » ISO 15380 - HEPR
- » ZF TE-ML 07H

#### ROWE recommendations

- » CAT-BF1, BF2
- » CNH MAT 309
- » Danfoss Power Solutions-520L0463
- » JCMAS HK VG46W
- » Komatsu Forest
- » Palfinger
- » Poclain Hydraulics
- » Volvo Hydraulics

## Hydraulic oils (HEPR)

### HIGHTEC SUNLUB® LONGLIFE 46 (Art.-No.: 49356)

This product is characterized by a fully synthetic zinc- and ash-free technology. Developed for extra extended oil life. Based on high-quality polyalphaolefins (PAO). Awarded by the EU ECOLABEL.



#### Approvals

- » SS 155434 AAV 46 environmentally acceptable

#### Specifications

- » DIN 51 524-3 - HVLP (TOST wet)
- » Chinese specification GB111118.1-2011 L-HV
- » ISO 15380 - HEPR
- » EATON E-FDGN-TB-002-E
- » EATON Brochure 03-401-2010 Rev.1
- » PARKER Denison HF-0, HF-1, HF-2
- » ZF TE-ML 07H

#### ROWE recommendations

- » CAT-BF1
- » CNH MAT 309
- » Danfoss Power Solutions-520L0463
- » Komatsu Forest
- » Palfinger
- » Poclain Hydraulics

## Hydraulic oils (HEES)

### HIGHTEC SUNLUB® SYNTH 46 (Art.-No.: 49906)

Fully synthetic, high-performance hydraulic oil based on saturated esters for extended oil service life and high system protection.



#### ROWE recommendations

- » DIN 51524 Teil 3
- » ISO 15380 HEES
- » EATON Brochure 03-401-2010 Rev.1
- » JCMAS HK P-041 & -P042



## More HIGHTEC products at a glance on your smartphone

Alongside illustrations of containers, current releases, specifications, plus the latest safety data sheets and product information in various languages, you can find all relevant information on the products and our extensive product range via the scanned QR code.

All this and much more can now be accessed with your smartphone. To do so, simply scan the relevant QR code or go to our homepage.

[www.rowe-oil.com](http://www.rowe-oil.com)



**HIGHTEC SUNLUB®**  
**CHAIN XT100** (Art.-No.: 49158)

High quality, readily biodegradable saw chain oil. The product is free from mineral oil. Excellent adhesive and sliding properties. Maximum protection against resinification. Awarded with the EU ECOLABEL.



**HIGHTEC GREASEGUARD**  
**Ca-EP 2 ECO** (Art.-No.: 50080)

Sustainable, calcium-based high-performance grease with biodegradable synthetic base oils derived from renewable raw materials and excellent EP properties. Recommended for use in rolling and plain bearings. Temperature range: -40°C to +120°C.



**Specifications**

» DIN 51 502/51 825: KP 2 K-40

 -40 °C ... +120 °C  
 -40 °F ... +248 °F





## Industrial gear oils (HEES)

### **HIGHTEC SUNLUB®**

#### **SYNTH CLP 68 ECO** (Art.-No.: 49411)

Fully synthetic high-performance ester based gear oil. Particularly suitable for high thermal loads where a high load carrying capacity is required. Biodegradable according to OECD 301B.



#### **Specifications**

- » AGMA 9005-F16
- » David Brown S1.53.101
- » DIN 51517 CLP
- » ISO 12925-1 CKES
- » Reintjes Gears BV1597/2;BV1597/4;  
BV1917/2;BV1917/4;BV2060/2;BV2060/4
- » Schuler Pressen (ex Müller Weingarten)  
DT 55055 01.2013
- » SMS Group SN180-3

### **HIGHTEC SUNLUB®**

#### **SYNTH CLP 100 ECO** (Art.-No.: 49412)

Fully synthetic high-performance ester based gear oil. Particularly suitable for high thermal loads where a high load carrying capacity is required. Biodegradable according to OECD 301B.



#### **Specifications**

- » AGMA 9005-F16
- » David Brown S1.53.101
- » DIN 51517 CLP
- » ISO 12925-1 CKES
- » Reintjes Gears BV1597/2;BV1597/4;  
BV1917/2;BV1917/4;BV2060/2;BV2060/4
- » Schuler Pressen (ex Müller Weingarten)  
DT 55055 01.2013
- » SMS Group SN180-3

### **HIGHTEC SUNLUB®**

#### **SYNTH CLP 150 ECO** (Art.-No.: 49413)

Fully synthetic high-performance ester based gear oil. Particularly suitable for high thermal loads where a high load carrying capacity is required. Biodegradable according to OECD 301B.



#### **Specifications**

- » AGMA 9005-F16
- » David Brown S1.53.101
- » DIN 51517 CLP
- » ISO 12925-1 CKES
- » Reintjes Gears BV1597/2;BV1597/4;  
BV1917/2;BV1917/4;BV2060/2;BV2060/4
- » Schuler Pressen (ex Müller Weingarten)  
DT 55055 01.2013
- » SMS Group SN180-3





## Cutting oils

### **HIGHTEC SUNLUB®** **CUT 9** (Art.-No.: 49602)

Fine-grinding oil. Non-water-mixable. H1-certified for use around foodstuffs.



### **HIGHTEC SUNLUB®** **CUT 22 ECO** (Art.-No.: 49654)

High-performance cutting fluid for machining based on high-quality base oils. Awarded the EU Ecolabel.



### **HIGHTEC SUNLUB®** **MF 32-46 ECO** (Art.-No.: 49672)

Low-viscosity, sustainable multi-purpose oil for hydraulics and machining. Suitable for light to medium-duty machining operations due to its highly polar components and pressure-resistant lubricating film.



### **HIGHTEC SUNLUB®** **CUT MFS 32 ECO** (Art.-No.: 49671)

Universally applicable, non-water-miscible cooling lubricant for drilling, turning, milling and broaching of aluminum, grey cast iron, steel and stainless steel materials.



## Grinding oils

### **HIGHTEC SUNLUB®** **GRIND 7 ECO** (Art.-No.: 49641)

Non-water-miscible bio-based cutting fluid for grinding fluid, awarded the EU ECOLABEL.



## Forming lubricants

### **HIGHTEC SUNLUB®** **FORM 90 ECO** (Art.-No.: 49673)

Medium-viscosity forming lubricant with high EP performance. Suitable for medium-duty forming processes due to its highly polar components and its extremely pressure-resistant lubricating film. Based on renewable raw materials.



### **HIGHTEC SUNLUB®** **FORM 150 ECO** (Art.-No.: 49667)

High Performance Bio Forming Lubricant. For stamping, drawing, deep-drawing and multistep forming. Awarded with the EU ECOLABEL.



### **HIGHTEC SUNLUB®** **FORM SSU 5 ECO** (Art.-No.: 49670)

Forming lubricant for stamping of steel, stainless steel, aluminum, and non-ferrous materials. It is based on high-quality base oils that are 100% derived from renewable sources.



### **HIGHTEC SUNLUB®** **FORM 46P** (Art.-No.: 49656)

Forming oil. For medium-duty to heavy-duty forming processes. H1-certified for use around foodstuffs. Efficient and sustainable.



### **HIGHTEC SUNLUB®** **FORM NMU 150 ECO** (Art.-No.: 49674)

High-performance multifunctional oil. Particularly suitable for simultaneous use as bedway and cold extrusion oil based on renewable raw materials.



### **HIGHTEC SUNLUB®** **FORM NDN 330 ECO** (Art.-No.: 49675)

Highly viscous forming lubricant with high lubricating performance and EP wear protection for machining aluminum, non-ferrous metals, stainless steel and steel based on renewable raw materials.



# ROWE: A FAMILY BUSINESS LOOKING TO THE FUTURE

We offer our customers a complete range of innovative, high-quality motor oils, coolants and special products for industrial applications.

ROWE products are manufactured using audited, sustainable processes in one of the most cutting-edge lubricant factories in Europe and are available to specialist retailers, mineral oil retailers, workshops and end users in more than 80 countries throughout the world. The family business, founded in 1995 and headquartered in Worms, generated a turnover of around EUR 154 million in 2023 with a workforce of more than 300 people.

## DIVERSE DEVELOPMENT EXPERTISE - A LEADER IN COOLANTS

Thanks to internal research and development, the racing experience of the in-house ROWE RACING team and the latest manufacturing technologies, ROWE achieves the highest quality. Numerous approvals and audits from well-known automobile

manufacturers and other industrial companies prove that ROWE products exceed even the most demanding standards. In particular, when it comes to automotive coolants, we are one of only a few manufacturers worldwide to offer certification according to the automotive standard IATF 16949. Meanwhile, fluids for electromobility are also part of our research and development expertise - a future field in which we are constantly investing.

## SUSTAINABILITY IS PART OF OUR CORPORATE DNA

The company has always been characterized by progressive, sustainable solutions. With the opening of one of the most modern lubricant plants in Europe in 2014, ROWE set new standards in the industry.



### ROWE IN WORMS

One of the most cutting-edge lubricant factories in Europe





The main plant in Worms was designed and built from the ground up with sustainability in mind. This is evident, among other things, in the more than 65 km of pipework. Each of these "dedicated lines" is used exclusively for one specific product. This reduces the environmental impact by avoiding the need to flush the pipes countless times. Waste heat from production is used to heat the buildings and for the production processes themselves. ROWE also boasts an advanced process control system and fully CO<sub>2</sub>-compensated manufacturing. Sustainability has even been taken into account in the company's own containers. Manufactured by subsidiary company Palbo GmbH, they are made from around 50% recycled material.

## CONTINUITY AND PROGRESS IN THE SECOND GENERATION OF THE COMPANY

In early 2024, Alexandra Kohlmann, daughter of company founder Michael Zehe, took the helm at ROWE. Together with long-standing employee and new joint CEO Stefan Wermter, she is leading the company into the future.



**Stefan Wermter**  
CEO

**Dr. Alexandra Kohlmann**  
CEO



**FULL RANGE OF LUBRICANTS**  
Includes, for example, motor oils with numerous endorsements from manufacturers



**MODERN LABORATORY**  
Internal research and development



**DEDICATED LINES**  
More than 65 km of pipelines in the Worms plant

# ROWE KEY FACTS & FIGURES

- » 85,000 m<sup>2</sup> of floor space (equivalent to 12 football pitches)
- » more than 65 km of pipelines
- » more than 260 pumps
- » a total of 58 mixing vessels
- » a tank capacity of 11 million liters
- » a state-of-the-art plant for the production of 4,000 tonnes of lubricating grease per year
- » 22 state-of-the-art filling systems
- » a filling rate of up to 3,000 containers per hour
- » storage bays for 14,000 Euro pallets
- » 54 additional push-back racks for order picking
- » 4,000 m<sup>2</sup> solar plant in Worms with an output of 749 kWp.  
Additional solar plant in Bubenheim with an output of 488 kWp
- » 300 employees





**ROWE**®


**ROWE**®

**EMOT**®  
J10 ROTOR

08 07 06 05 04 03 02 01

# **ROWE**<sup>®</sup>

**ROWE MINERALÖLWERK GMBH**  
Langgewann 101, D-67547 Worms

 +49 6241 5906-0

 +49 6241 5906-999

 [info@rowe-oil.com](mailto:info@rowe-oil.com)

[www.rowe-oil.com](http://www.rowe-oil.com)