



### Health, safety & performance

Using advanced technologies we bring to market the first and only metalworking fluid, that replaces standard oils with biosourced polymers, providing the best performance for the operators and their environment.



- Less hazardous components
- Boron free technology
- No pictograms



- No odor
- No dermatosis
- No fumes
- No oily machines / workspace



- Longer tool lifetime
- Longer fluid timespan
- Less consumption
- Increased productivity



**RENEWABLE  
AND CLEAN  
SOURCE LUBRICITY**

**OUR LUBRICANTS  
PROTECT BEYOND  
JUST TOOLS**



**A major player**  
With our production, supply chain and commercial presence in more than 160 countries, we deliver a full range of lubricants.

**Support and partnership**  
Thanks to local technical presence, we provide a high level of service to optimize your Total Cost of Ownership.

**References & OEMs**  
TotalEnergies Lubrificants cooperates with equipment manufacturers to create high-technology products for optimal performance and production of your machinery.

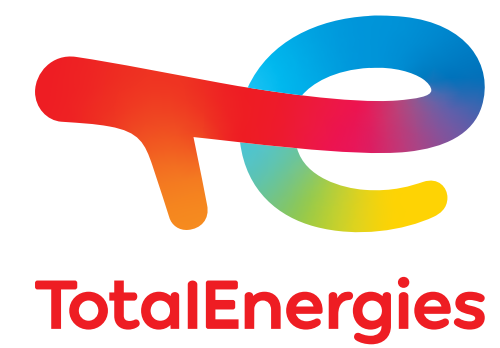


**Innovation & Research**  
TotalEnergies Lubrificants invests in biotechnologies to find the most suitable components to reach energy efficiency through formulations designed in our Research Centers.

**Quality and environment**  
TotalEnergies Lubrificants ISO 9001 and 14001 certifications are the guarantee of a long term commitment to quality and environment. From the initial design stage, our R&D teams seek to develop products that minimize toxicity risks and environmental impact.



**Folia**  
Innovative metalworking fluid technology  
The outstanding solution for you and your operations



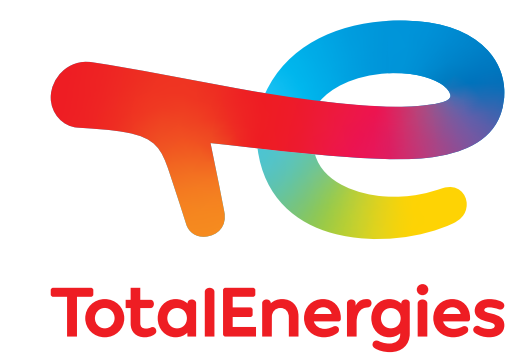
lubricants.totalenergies.com



TotalEnergies Industry Solutions

✉ ms.metalworking@totalenergies.com

Safety Data Sheets are available at ms-sds.totalenergies.com





# Folia

The Folia range is a revolution in the field of metalworking. It is a biosourced and water based fluid free of oils and emulsifiers.

With a high lubricity and an excellent cooling power, it offers users a unique solution for multiple metalworking operations.



RENEWABLE  
AND CLEAN  
SOURCE  
LUBRICITY

**HIGH**

LUBRICITY  
COOLING POWER  
VERSATILITY



More savings



Eco-friendly



Higher productivity



More satisfied employees



Less maintenance



TECHNICAL DATA AND SPECIFICATIONS

**Tools**

- Big reduction in tooling expenses
- Allows to increase load and cutting speed

**Products**

- Higher production rate
- Excellent finishing properties
- Versatile fluid which can be applied in a broad range of applications:
  - Metals: ferrous & non ferrous
  - Duty range: moderate to severe
  - Water hardness: very soft - very hard

**Operations**

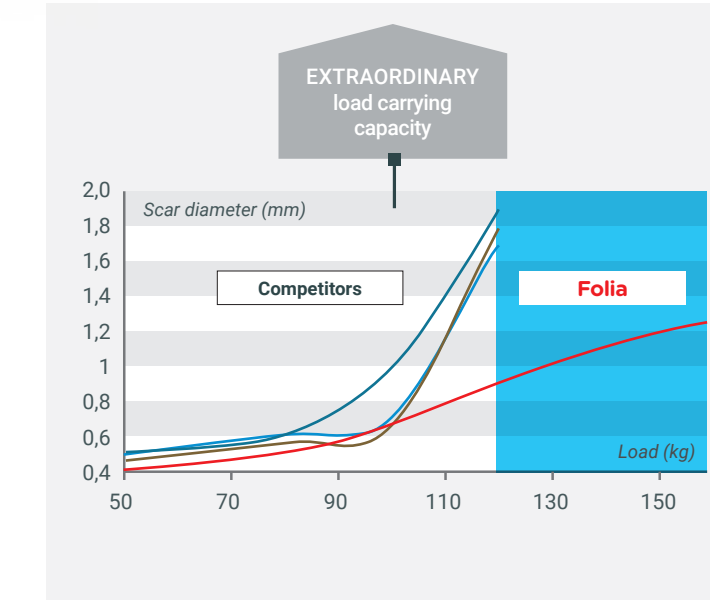
- Preserves the machines paint
- Reduction in machine stoppage
- Better operation visualization
- Better preservation of the sealing components / rubbers
- No burns on chips

**Folia**

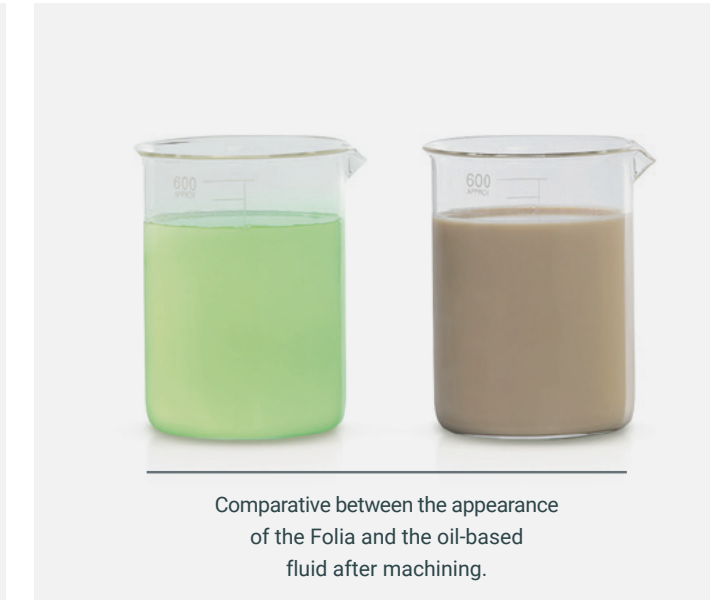
- Excellent lubrication and refrigeration
- Long fluid lifespan
- Compatible with slideway oils
- Does not foam
- Does not mix with tramp-oil
- Limited inventory
- Non-hazardous

## FOUR BALL TEST

ASTM: D2783



## VISUAL & COLOR



## DILUTION RATE

