



## SUSTAINABLE METALWORKING

HAKUFORM SE  
Water-miscible cooling lubricants



Harmony in  
Chemistry

# WATER-MISCIBLE COOLING LUBRICANTS

## SUSTAINABLE EMULSIONS FOR MACHINING AND FORMING

With our **HAKUFORM SE** series we take the standard in water-miscible cooling lubricants to the next level. Combining the properties and advantages of our long running and established products with those of sustainable and aromatic-free base oils.

The lubricants bring maximum performance to cutting operations and enhance tool lifetime. Corrosion protection is outstanding and the fluid provides both pH- and bio-stability.

As always, our focus is on workplace safety! Through the use of aromatic-free base oils, the fluid is skin-safe with very little odor and minimal evaporation. These factors increase user safety and reduce your consumption!

**HAKUFORM SE** cooling lubricants also provide CO<sub>2</sub> savings! For the exact savings, based on NSF and IFEU institute data, we will gladly issue you with a certificate.

All products are free of labeling and are classified in water hazard class 1. All formulations are without the use of boron, FAD, DCHA, 2-Aminoethanol and Phenoxyethanol.

### ADVANTAGES

- The next generation of water-miscible cooling lubricants
- Sustainable, aromatic-free base oils
- Universal use for almost all metalworking processes
- Skin safe
- Low evaporation
- Mild odor
- Extremely user-friendly
- Free of labeling

This is #SustainableMetalworking

Grinding / simple cutting operations	Fe	<b>HAKUFORM SE 821</b>	Free of biocides, transparent, easy to remove
Simple and medium cutting operations	Fe, Al	<b>HAKUFORM SE 823</b>	Free of biocides, easy to remove
Heavy cutting operations	Fe, Al	<b>HAKUFORM SE 833</b>	Ideal for heavy operations
Heavy cutting operations	Fe, Al	<b>HAKUFORM SE 835</b>	Ideal for aluminum, high performance, free of biocides
Simple and medium cutting operations	Fe, Al	<b>HAKUFORM SE 846</b>	All-rounder, high pH and biostability

Legend: Fe = Ferrous alloys, Al = Aluminum alloys