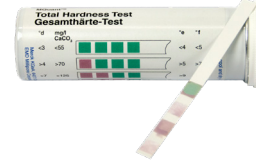




# ANTI-FOAMS AND CIMPLUS PERFORMANCE ENHANCING PRODUCTS

for Cimcool metalworking fluids  
*Company confidential - for internal use only*



PRODUCT LINE INFORMATION SHEET

## History of innovation

Since 1886 Milacron has been the industry leader in providing innovative solutions to maximize productivity in the metalworking industry.

130 years of experience, research and development in the machine tool industry provided the catalyst for the pioneering of Cimcool, the first synthetic metalworking fluid. Cimcool became a reality in 1940's and quickly earned a reputation of quality, providing excellent performance while maintaining strict engineering and manufacturing standards.

Over the last 75 years, our research labs have continued to innovate by developing a comprehensive family of premium synthetic, semisynthetic and soluble oil metalworking fluids. Every step of the way, Milacron invented the products and processes our customers needed - setting the standards for industry performance.

Below an overview of Milacron's range of anti-foams and performance enhancing products.

## Applications

- **Anti-foams** for improvement of foam control.
- **pH boosters** for increasing or restoring mix pH.
- **Corrosion inhibitors** for ferrous and non ferrous materials.
- **Products for increasing or restoring washing action** of mixes.
- **Products for increasing the Extreme Pressure (EP) performance** of mixes.

MILACRON®



**CIMCOOL®**  
FLUID TECHNOLOGY

	Suitable for product type				Action	Dosage	Remarks
	Synthetic	Semi	Emulsion soluble oil	Neat oil			
<b>ANTI-FOAMS</b>							
ANTIFOAM S	●				Defoaming / improve airrelease.	0,01%	Overdosing may enhance foaming and residues
ANTIFOAM SAR	●				Improve airrelease.	0,01%	Only after consultation with TS
ANTIFOAM M				●	Defoaming / improve airrelease.	0,025%	Maximum total addition is 0,1%
ANTIFOAM AF		●	●		Defoaming. Dosage	0,01 -0,05%	Stir before use. Contains emulsifier so better suitable for small tanks
ANTIFOAM H		●	●		Defoaming. Dosage	0,01%	Stir before use. Needs sufficient motion/agitation to mix in
ANTIFOAM HP	●	●	●		Defoaming. Dosage	0,005 - 0,01%	Stir before use. Needs sufficient motion/agitation to mix in. Use extremely low dosage for Synthetics
ANTIFOAM HW		●	●		Defoaming at higher mixhardness.	0,01%	Stir before use. Needs sufficient motion/agitation to mix in
FOAM DEPRESSANT E		●	●		Defoaming by increasing mixhardness. Will increase hardness by ~10dH	0,1%	Overdosing may lead to mixbreaking, residues and insufficient washing action.
<b>PH BOOSTERS</b>							
CIMPLUS® 63	●	●	●		Raising and stabilizing mix pH, improving corrosion protection.	0,05 - 0,1%	Amine mixture
CIMPLUS® PH9	●	●	●		Raising and stabilizing mix pH, improving corrosion protection.	0,05 - 0,1%	German market
CIMPLUS® T4018		●	●		Raising and stabilizing mix pH, improving corrosion protection and mixstability.	0,2%	Amine mixture, contains DCHA
CIMPLUS® LC		●	●		Raising and stabilizing mix pH.	0,02%	For use in products for yellow metals, amine free products and central systems with low (<8,6) pH values.
<b>INCREASING NON-FERROUS CORROSION PROTECTION</b>							
ADDITIVE AL	●	●	●		Aluminium (alloy) corrosion inhibitor.	0,05%	Regular additions may be necessary
INHIBITOR EC	●	●	●		Copper (alloy) corrosion inhibitor.	0,01%	Regular additions may be necessary
<b>INCREASING FERROUS CORROSION PROTECTION</b>							
CIMPLUS® T4000	●	●	●		Increasing ferrous corrosion control.	0,1 - 0,2%	
CIMPLUS® T4002	●	●	●		Increasing buffering capacity and ferrous corrosion control.	0,5%	Alkanolamine borate based
CIMPLUS® T4009	●				Increasing corrosion protection in Cimtech A31 mixes.	0,4%	Could affect aluminium compatibility, pre-testing required
<b>INCREASING WASHING ACTION</b>							
CLEANING AGENT 2E	●	●	●		Increasing washing action and mixstability	0,02 - 0,05%.	Non-ionic based detergent. Watch foaming!
CIMPLUS® T4010		●	●		Anionic based additive to improve settling behaviour and washing action.	0,1 - 0,2%	
CIMPLUS® A2014		●	●		Anionic based additive to improve emulsion stability, cleanliness, anionic values.		Dosage and suitability to be determined by lab, contains around 30% oil, developed for anionic dropping due to chipping.
INHIBITOR CP		●	●		Increasing of washing action and emulsion stability by complexing ions.	0,02%	Complexes Ca, Mg and other metal ions present in mixes. Affects aluminium compatibility. Pre-testing required.
WATER CONDITIONER		●	●		Complexing agent reducing mixhardness.	0,1%	EDTA solution, check if allowed! Mix hardness reduction up to 10 dH.
<b>INCREASING EP LUBRICITY</b>							
CIMPLUS® T4005		●	●		Sulphur based additive to enhance EP lubricity on ferrous metals.	1 - 2%.	Enhancing performance in operations like deep-hole drilling, broaching etc.
<b>CATIONICS FOR ENHANCING OIL REJECTION</b>							
ADDITIVE OS	Cleaner				Enhancing oilseparation in demulsifying parts cleaners.	0,1%.	Cationic based, chloride free, dosage can be repeated depending on level of oil.
ADDITIVE 77	●				Defoaming / improve airrelease / Enhance oilrejection.	0,01%	Cationic based, will increase chloride levels, do not overuse

