



Product	Key Features	Machining capability	Key Applications	Key Materials	Viscosity Grade	Performance Levels
<b>Semi synthetic water soluble MWF</b>						
MECAFLUID SS 1001 ECO	<ul style="list-style-type: none"> <li>Boron and Biocide free</li> <li>Low oil content</li> <li>Excellent hard water tolerance</li> <li>Excellent stability in use</li> </ul>	General purpose machining, light duty machining	Milling, turning, drilling and grinding	Steel, Cast iron		SUPREME
MECAFLUID SS 3001 ECO	<ul style="list-style-type: none"> <li>Boron and Biocide free</li> <li>Medium oil content</li> <li>EP additive</li> <li>Excellent hard water tolerance</li> <li>Excellent stability in use</li> </ul>	General purpose machining, and heavy duty machining	Milling, turning, drilling, boring and grinding	Steel, Cast iron, Aluminium		SUPREME
MECAFLUID SS 4001 ECO	<ul style="list-style-type: none"> <li>Boron and Biocide free</li> <li>EP additive</li> <li>Excellent hard water tolerance</li> <li>Excellent stability in use</li> </ul>	General purpose machining, heavy duty machining	Milling, turning, drilling, boring and grinding	Steel, Cast iron, Aluminium, Aerospace alloys, Yellow metals		SUPREME
MECAFLUID SS 3001 FF	<ul style="list-style-type: none"> <li>Biocide free</li> <li>Medium oil content</li> <li>Excellent hard water tolerance</li> <li>High stability in use</li> </ul>	General purpose machining and heavy duty machining	Milling, turning, drilling and grinding	Steel, Cast iron, Aluminium		PREMIUM
MECAFLUID SS 3001	<ul style="list-style-type: none"> <li>Medium oil content</li> <li>High stability in use</li> <li>Very good rust and corrosion protection</li> </ul>	General purpose machining and heavy duty machining	Milling, turning, drilling and grinding	Steel, Cast iron, Aluminium		STANDARD
<b>Synthetic fully soluble</b>						
MECAFLUID SYN 1001 ECO	<ul style="list-style-type: none"> <li>Boron and Biocide free</li> <li>Oil free</li> <li>Excellent stability in use</li> <li>Excellent rust and corrosion protection</li> </ul>	Grinding	Grinding	Steel, Cast iron		SUPREME
<b>Water soluble emulsion MWF</b>						
MECAFLUID SM 4001 ECO	<ul style="list-style-type: none"> <li>Boron and Biocide free</li> <li>Exceptional for yellow metals</li> <li>High oil content emulsion</li> <li>Excellent hard water tolerance</li> <li>Excellent stability in use</li> </ul>	General purpose machining, heavy duty machining	Milling, turning, drilling, boring	Steel, Aluminium, Aerospace alloys, Yellow metals		SUPREME
MECAFLUID SM 5001 ECO	<ul style="list-style-type: none"> <li>Boron and Biocide free</li> <li>High oil content</li> <li>EP additive</li> <li>Excellent hard water tolerance</li> <li>Excellent stability in use</li> </ul>	General purpose machining, heavy duty machining	Milling, turning, drilling, boring	Steel, Cast iron, Aluminium, Aerospace alloys, Yellow metals		SUPREME
<b>Synthetic ester based neat oil</b>						
MECAFLUID NE 8 SYN	<ul style="list-style-type: none"> <li>Synthetic neat oil</li> <li>Excellent coolant and lubrication</li> <li>Excellent resistance to oxidation</li> </ul>	General purpose machining, and grinding	Grinding	Steel, Cast iron, Aluminium, Aerospace alloys, Yellow metals	8	SUPREME
<b>Neat oil</b>						
MECAFLUID NO 23 EP	<ul style="list-style-type: none"> <li>Neat cutting fluid with EP additives</li> <li>Yellow metal compatibility</li> <li>Very good extreme pressure performance</li> </ul>	General purpose machining and heavy duty	Heavy duty machining, grinding	Steel, Cast iron, Aluminium, Aerospace alloys, Yellow metals	23	STANDARD



**PROVEN EXPERTS,  
ALWAYS READY TO HELP!**

At the heart of our services, our experts strive to give you the peace-of-mind you're looking for. Partner with us and take your business to the next level.

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**PETRONAS**  
Fluid Technology  
Solutions™

**TAKING YOU TO THE NEXT LEVEL  
IN OPERATIONAL PERFORMANCE**  
**MECAFLUID**

**PETRONAS**  
Fluid Technology  
Solutions™

**BETTER PERFORMANCE IN MULTI-METAL MACHINING**

MECAFLUID is a range of metalworking fluids that include the latest Boron and Biocide free (formaldehyde free) formulation technology, which gives you increased flexibility and productivity in your machine shop, at the same time as being more pleasant and safer to use.

Thanks to the stable emulsion of the water-soluble fluids, they are suitable for use in a variety of water qualities and are proven to be bacterial and fungal resistant. MECAFLUID can extend tool and sump life, as well as reducing maintenance costs and downtime.



Formulated for improved productivity, flexibility and safety

**YOUR CHALLENGES, OUR EXPERTISE**

PETRONAS MECAFLUID is a range of chlorine, phenol and nitrite free water soluble and neat metalworking fluids. We have designed this range to meet the requirements of modern industry which has an emphasis on cost saving, with demands for increased productivity and flexibility, as well as providing a safer working environment.

Our MECAFLUID range includes the latest Boron and Biocide free (formaldehyde free) formulation technology for machining with a wide range of metals.

**YOUR KEY TO MAXIMISING PERFORMANCE**

Focusing our expertise, we've developed a comprehensive portfolio of PETRONAS MECAFLUID that serves every type of multi-metal machining. Choose the right product for your application needs and take the operational performance of your MECAFLUID to the next level.

Increasing performance and protection  
Improving uptime and lowering maintenance costs

	Soluble	Neat
SUPREME	<b>MECAFLUID SS 1001 ECO</b> ⬇ Boron and Biocide free ⬇ Low oil content ⬇ Excellent hard water tolerance ⬇ Excellent stability in use	
	<b>MECAFLUID SYN 1001 ECO</b> ⬇ Boron and Biocide free ⬇ Oil free ⬇ Excellent stability in use ⬇ Excellent rust and corrosion protection	
	<b>MECAFLUID SS 3001 ECO</b> ⬇ Boron and Biocide free ⬇ Medium oil content ⬇ EP additive ⬇ Excellent hard water tolerance ⬇ Excellent stability in use	
	<b>MECAFLUID SM 5001 ECO</b> ⬇ Boron and Biocide free ⬇ High oil content ⬇ EP additive ⬇ Excellent hard water tolerance ⬇ Excellent stability in use	
	<b>MECAFLUID SM 4001 ECO</b> ⬇ Boron and Biocide free ⬇ Exceptional for yellow metals ⬇ High oil content emulsion ⬇ Excellent hard water tolerance ⬇ Excellent stability in use	
	<b>MECAFLUID SS 4001 ECO</b> ⬇ Boron and Biocide free ⬇ EP additive ⬇ Excellent hard water tolerance ⬇ Excellent stability in use	<b>MECAFLUID NE 8 SYN</b> ⬇ Synthetic neat oil ⬇ Excellent coolant and lubrication ⬇ Excellent resistance to oxidation
PREMIUM	<b>MECAFLUID SS 3001 FF</b> ⬇ Biocide free ⬇ Medium oil content ⬇ Excellent hard water tolerance ⬇ High stability in use	
STANDARD	<b>MECAFLUID SS 3001</b> ⬇ Medium oil content ⬇ High stability in use ⬇ Very good rust and corrosion protection	<b>MECAFLUID NO 23 EP</b> ⬇ Neat cutting fluid with EP additives ⬇ Yellow metals compatibility ⬇ Very good extreme pressure performance
BASIC	<b>First price MECAFLUID</b>	



**FTS SERVICE PROGRAM – TAILOR-MADE FOR YOU**

At PETRONAS, we believe success is made by close partnerships. It is that very belief that drives us to work together with you in overcoming the challenges you face – from demands of higher productivity to operating under intense, severe conditions. That's why we present to you our **Fluid Technology Solutions™** Service Program – a tailor-made range of services designed to maximise your business performance. From specialised on-site analysis to emergency support for operational recovery, we are committed to assisting you in every possible situation. Partner with us and take your business to the next level.