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METAL WORKING FLUIDS



CARBORUNDUM UNIVERSAL LIMITED

ABOUT CUMI



Leading Manufacturer of Coated Abrasives, Bonded Abrasives, Non-woven, Metalworking Fluids, Power Tools and Tools for Stones.

About CUMI

Carborundum Universal Limited (CUMI) founded in 1954, is a pioneer in the manufacture of coated abrasives and bonded abrasives in India in addition to Super Refractories, Electro Minerals, Industrial Ceramics. It is a part of the Murugappa Group of companies.

Through value chain integration, CUMI has evolved into a mines-to-market company with operations encompassing mining, power generation, fusion, manufacturing, marketing and distribution.









Presence in **6 continents**



Sold in over **50+ Countries**



Metal Working Fluids from the House of CUMI

CUMI offers a diverse range of Metal Working Fluids tailored to meet various coolant requirements in metal cutting. Our coolants effectively reduce tool wear, achieve a high-quality surface finish, and provide a cost-effective solution.

Benefits of CUMI coolants:

- Better Safety Made with premium performance additives that are physiologically and hygienically harmless.
- Improves Tool Performance & Lifespan Reduces cutting-edge temperature by eliminating friction and deformation.
- Eco-Friendly- Contains selected emulsifiers and excellent corrosion inhibitors, meeting today's environmental standards.

Our coolants can be treated using conventional disposal procedures. Certain variants are mineral oil-free and do not emulsify tramp oils, facilitating easy skimming from the coolant tanks and disposal alongside waste oils, as mandated by regulations.

This brochure provides an overview of CUMI's standard products. For detailed information on each product, please contact our team for product & safety data sheets. Customizable specialty products are also available upon request.





HIGH OIL CONTENT EMULSION

Delivering superior lubrication and cooling, high oil content emulsions enhance grinding efficiency with excellent surface finishes and extended tool life. Engineered for high-performance applications, they ensure unmatched stability and consistent results.

Product Name	Appearance	Water Recommendation	Application	Features
CUMICHEM SOL 829HM	OL 829HM Emusion Soft & Hard		 Cutting and grinding of all ferrous metals Cast Aluminium and Aluminium Alloys 	 Presence of Extreme pressure properties Excellent tool life Better hardwater stability Designed for heavy duty operations
CIMPERIAL HD 225FF	Milky Emusion	Soft & Hard	 CBN Grinding Cast Aluminium and Aluminium Alloys 	 Presence of Extreme pressure properties Excellent tool life Free from Formaldehyde and Boron Designed for heavy duty operations
CUMI MUNTZOL 119	UNTZOL Milky Soft & Hard		 Cutting and grinding of all ferrous metals Cast Aluminium and Aluminium Alloys Al Alloy (60,70 Series) Yellow metals 	 Free from Formaldehyde and Boron, Reduction in disposal cost Excellent aluminium compatibility Presence of Extreme pressure properties Designed for heavy duty operations
CUMI Milky FERRO 216 Emusion		Soft	• Cutting and grinding of all ferrous metals	 Free from Formaldehyde and chlorine High alkaline with low topup design Excellent bio stability with good tramp oil rejection Extended sump life
CUMI Milky Soft MACRO Emusion Soft		Soft	 Steel and its alloys Cast Aluminium and Aluminium Alloys 	 Presence of Extreme pressure properties Excellent tool life Designed for heavy duty operations
CUMI STAR 306/ CUMI SOL 707	Milky Emusion	Soft	 Steel and its alloys Cast Aluminium and Aluminium Alloys 	 General purpose grinding and machining fluid for optimum performance
ECOSTAR 306	Milky Emusion	Soft	 Steel and its alloys Cast Aluminium and Aluminium Alloys 	 General purpose grinding and machining fluid for optimum performance Economical to use

SEMI SYNTHETIC FLUIDS

Combining the lubricating power of oil with the cooling efficiency of synthetics, these fluids reduce wear, improve performance, and ensure clean operations, making them ideal for precision grinding and diverse industrial applications.

Product Name Ap	opearance	Water Recommendation	Application	Features		
CIMSTAR 402 FF	Translucent Soft		 Grinding & Machining of Medium duty cast iron and low to medium duty Steel 	 Long fluid life due to the special product composition Clean machines due to good washing action Formaldehyde releasing biocide-free 		
CIMVANTAGE 31-48	Translucent Hard Medium duty cast		 Grinding & Machining of Medium duty cast iron and low to medium duty Steel 	 Clean and mild product with excellent washing action Excellent ferrous corrosion properties. Good foam control in the indicated water hardness range. 		
CIMSTAR 620 FF Tro	IAK Translucent Soft		 Grinding & Machining of low to medium duty Steel & Aluminium 	 Suitable for a wide range of materials and operations. Does not stain aluminium and aluminium alloys. Free from formaldehyde releasing biocides. 		

WATER DILUTABLE PRODUCTS

Product Name	Appearance	Water Recommendation	Application	Features
NEW CUMI MACHGRIND 223 PLUS	Translucent	Soft & Hard	 Cutting & Grinding of all Ferrous metals & its alloys including Cast Iron 	 Medium oil content semi synthetic suitable for both grinding and machining Excellent flushing action & Rust protection.
CUMI MICROCUT 719	Translucent	Soft & Hard	 Cutting and grinding of all ferrous metals 	 Low oil content semi synthetic Replace synthetic fluid with better lubricity Better flushing action
CUMI BLAZE 118LT	Translucent	Soft and Hard	 Cutting and grinding of all ferrous metals 	 Medium oil content semi synthetic suitable for both grinding and machining Low top-up design with reduce overall CPC
CUMI MACH GRIND 223	Translucent	Soft & Hard	 Cutting and grinding of all ferrous metals 	 Medium oil content semi synthetic suitable for both grinding and machining Better flushing action
CUMI FERRO 216 SWM	Translucent	Soft	 Cutting and grinding of all ferrous metals Cast Aluminium and Aluminium Alloys 	 High oil content semi synthetic suitable for both grinding and machining of ferrous and non-ferrous Low top-up design with reduce overall CPC
CUMI FERRO 216 ADVANCE	Translucent	Soft & Hard	 Cutting and grinding of all ferrous metals Cast Aluminium and Aluminium Alloys 	 High oil content semi synthetic suitable for both grinding and machining of ferrous and non-ferrous Low top-up design with reduce overall CPC Excellent sump life
CUMI MICRO S930	Translucent	Soft	 Suitable for grinding and machining of ferrous & its alloys 	 Excellent bio-stability with longer sump life Suitable for grinding & machining application
CUMI MICRO S930M	Translucent	Soft & Hard	• Cutting and grinding of all ferrous metals	 Excellent bio-stability with longer sump life Suitable for grinding & machining application Extended corrosion protection
CUMI MICRO S942	Translucent	Soft	 Suitable for grinding and machining of ferrous & its alloys 	 Excellent bio-stability with longer sump life Suitable for grinding & machining application Excellent tool life
CIMSTAR 560-02FF	Translucent	Soft	 Suitable for grinding and machining of ferrous & its alloys 	 Free from Formaldehyde High alkaline with low topup design Excellent bio stability with good tramp oil rejection Suitable for grinding application for bearing industries Extended sump life
CIMSTAR 560	Translucent	Soft	 Suitable for grinding and machining of ferrous & its alloys 	 Excellent bio-stability with longer sump life Suitable for grinding application for bearing industries
CIMSTAR 506	Translucent	Soft & Hard	 Suitable for grinding and machining of ferrous & its alloys 	 Medium oil content semi synthetic suitable for both grinding and machining of ferrous and non-ferrous Excellent sump life
CIMSTAR MB 403FF	Translucent	Soft	 Suitable for grinding and machining of ferrous & its alloys 	 Low oil content semi-synthetic provides good cooling action and better flushing action Compatible with lead and ferrous materials Suitable for lead roll grinding
CIMSTAR SIR	Translucent	Soft & Hard	 Suitable for grinding and machining of ferrous and its alloys 	 Low oil content semi synthetic Replace synthetic fluid with better lubricity Better flushing action

CUMI



SYNTHETIC FLUID

Designed for demanding conditions, synthetic fluids offer advanced cooling and exceptional cleanliness. They minimize residue, improve heat dissipation, and deliver superior surface finishes, even in high-speed grinding operations.

Product Name	Appearance	Water Recommendation	Application	Features	
CUMI SYNTH C 442	2 light yellow Sott & Hard		 Suitable for grinding of ferrous and its alloys 	 Excellent microbial control and long sump life Good corrosion protection and cleaning performance 	
CIMTECH 10			 Suitable for grinding of ferrous and its alloys, glass grinding and roll miller 	 Biostable and excellent tramp oil rejection Free from formaldehyde Suitable for roll grinding and glass grinding 	
CIMTECH 500	Transparent light yellow	Soft & Hard	 Suitable for grinding of ferrous and its alloys 	 Excellent lubricity suitable for CBN grinding application Better cleaning action and neat environment Excellent in low foaming and corrosion protection 	
CUMITECH C462TC	Soft & Hard		 Suitable for grinding of carbide tool 	 Prevent cobalt leaching Good flushing action and better corrosion protection 	

CLEANERS

Industrial-grade cleaners effectively remove oil, grease, dirt, and residues from metal surfaces. Designed for thorough cleaning, they improve surface preparation for processes like coating, welding, or assembly, maintaining product integrity.

Product	Application	Wa [.] Hard				Application		
Name	Application	Hard	Soft	Flash point deg	Temperature deg	Cleaning method	Compatible with	Features
CIMCLEAN PC230	PARTS CLEANER	_		_	— Room temp		• Ferrous • Al	 Function in ambient temerpature, ensures reduction in power cost High pressure washing
CIMCLEAN CWG222	MACHINE CLEANER	_		_	_	 Circulation cleaner Manual wiping 	• Ferrous	 Designed as system cleaner Better cleaning action
CUMI CLEAN CWF 242	PARTS CLEANER	—		—	55	 Spray Manual cleaning 	• Ferrous	 Non-foaming cleaner designed for Ferrous and its alloys Recommended for manual cleaning
CUMI CLEAN CWNF 244	PARTS CLEANER	—		—	55	• Spray	• Ferrous • Al	 Non-foaming cleaner designed for Ferrous and Non-ferrous alloys
CIMCLEAN SC 91-920	EVAPORATIVE PARTS CLEANER	_	—	62	Room temp	 Spray Dipping Manual cleaning 	• Ferrous • Al	 Solvent type evaporative cleaner for de-greasing application

RUST PREVENTIVES



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Providing robust protection against corrosion, rust preventives form a barrier that ensures the longevity and integrity of metal components during storage and transport.

Product Name	Density @ 29.5 deg	Viscosity @ 40 deg	Flash Point deg	Film type	Film thickness in micron	(Mc	ection onths) Outdoor	Features
CIMGUARD 20	0.795	2	72	Dry	3			 Excellent dewatering properties Year indoor rust protection. Thin film thickness, high coverage for low cost
CIMGUARD 40	0.872	15	64	Oil	25	—		 Rust protection from medium to long term indoor and overseas protection
CIMGUARD 90			—	NA	_	$\mathbf{\nabla}$	—	• Water soluble rust preventive for short term rust protection
CUMI RUSTOFF 508	0.823	1.95		Dry	5			• 3 month indoor rust protection
CUMI KOTE DW 985	0.825	2.3		Dry	4			• 6 month indoor rust protection
CUMI KOTE DW 120	0.831	2.3		Dry	6		—	• 1 month indoor rust protection

FORMING FLUIDS

Optimized for metal forming processes like drawing, stamping, and forging, forming fluids reduce friction, enhance tool life, and deliver precision in shaping components.

Product Name	Oil Category	Appaerance	Kinematic Viscosity @ 40°C, cSt	Flash Point, °C, (COC)	Copper corrosion @100°C for 3 hrs	Application	Features
CUMI FORM 1006	Solvent Based	Clear Liquid	1.2 -2.0	60	Ια	• Ferrous • Non ferrous	 Suitable for fin forming and stamping application Faster evaporation No ash content after heating
CUMI FORM 40	Mineral Based	Clear Liquid	90 -100	220	3b	FerrousNon ferrous	• Designed for heavy duty drawing





Non-water-miscible neat cutting oils provide excellent lubrication and heat dissipation, ensuring superior surface finishes for high-speed and demanding cutting operations

Product Name	Description	Appearance	Kinematic Viscosity @ 40°C, cSt	Flash Point, °C, (COC)	Copper corrosion @100°C for 3 hrs	Application	Features
CUMI NEAT 5	Low viscosity finishing oil for Honing, Lapping and Super Finishing. Blended with polar additives for excellent flushing and to provide good finish	Clear liquid	4.75 - 5.5	105	۱b	• Ferrous • Non ferrous	 Suitable for honing andpolishing Excellent lubricity with extreme pressure additive
CUM NEAT 10	Low viscosity grinding oil with excellent wetting, lubrication and cooling properties designed for grinding application	Clear liquid	9.5 - 11	120	۱b	• Ferrous • Non ferrous	 Suitable for grinding application Excellent lubricity with extreme pressure additive
CUMI NEAT HSG 14	Non chlorinated neat grinding oil with additive combination results in excellent cooling and wet properties. Low misting product allows for high speed, heavy duty gear grinding applications	Clear liquid	14 - 15	180	4α	• Ferrous • Non ferrous	 Suitable for high speed multi-rib grinding application Excellent lubricity with extreme pressure additive
CUMI OIL 308	Medium viscosity oil recommended for general duty machining application	Clear liquid	18 - 21	180	3b	FerrousNon ferrous	 Suitable for drilling, milling and high speed turning Excellent lubricity with extreme pressure additive
CUMI BROACH	Special additive combination designed for heavy duty broaching application	Clear liquid	15.2 - 17.6	180	1b	FerrousNon ferrous	 Heavy duty application (Deep hole drilling, Broaching & Boring) Excellent lubricity with extreme pressure additive
CUMI HOB	High viscosity oil for heavy duty machining and hobbing Excellent EP package for enhanching tool performance	Clear liquid	38 - 44	180	4b	• Ferrous • Non ferrous	 Heavy duty application (Hobbing & Milling) Low top-up









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