

GR4CONOL

CNC COOLING PERFORMANCE





Graconol Plus® - Cutting Edge Fluid of the next generation

Manufactured using up to 70% renewable resources, Graconol Plus® leverages Resonate Technology® to achieve an optimal balance between post-lubrication time and residue-free evaporation. No risk of explosion in systems equipped with exhaust systems. No micro-grooves due to delayed lubrication ensures high-precision results. Low evaporation heat ensures an optimal cooling temperature, reducing stress and deformation in workpieces for exceptionally precise outcomes. The evaporation time can be accelerated with the introduction of air without impact on quality.

- > **Applications:** Suitable for light to heavy operations, including cnc, turning, milling, drilling, and sawing.
- > Materials: For all types of materials.
- ➤ Working: The use of *Resonate Technology* ® ensures an ideal balance between post-lubrication time and residue-free evaporation, facilitating comfortable, high-level performance.
- Cost-Effectiveness: Thanks to its innovative Resonate Technology ® Graconol Plus® boasts low consumption and an exceptionally economical price per liter.
- > Sustainability: Graconol Plus * is based on a renewable resource, with up to 70% of its composition derived from renewable raw materials.
- Cooling & Flushing Capabilities: Exceptional flushing and cooling capabilities with minimal evaporation heat."

- "Cleaning: With Resonate Technology * there are no streaks or residues. Clean and dry workpieces can be processed within minutes. Graconol Plus * evaporates without leaving any residues, eliminating the need for cleaning.
- > Explosion Risk: Graconol Plus® is nonflammable and non-hazardous. It can be safely used in systems equipped with exhaust systems.
- Hazardous Material: Thanks to its innovative formula, Graconol Plus is not classified as hazardous material and can be stored in larger quantities without special requirements.
- ➤ Health: Graconol Plus * is made from renewable resources and poses no health risks."

Technical Data

Farbe	No color - pale yellow
Geruch	No smell
Flammpunkt	80°C
Wasser	Fully miscible
Dichte 20°C	1,063 g/cm ³
Kin. Viskosität 40°C	46 mm ² /s
Gefahrgut / Kennzeichnung	Omitted

Packaging Units



5, 20, 200 Liter - 1000 Litre IBC on request



GRACONOL® is an alcohol-based, low-viscosity cooling lubricant that evaporates without residues.

Due to the use of high-purity ingredients, the workpiece can be processed directly without cleaning. This guarantees a high degree of precision and surface quality, especially for challenging and high quality components such as those from mechanical engineering, automotive, aerospace and other demanding sectors.

- > Applicable for: simple heavy machining. Turning, milling, drilling, sawing
- Materials: Aluminium, Aluminium-Magnesium-, and Aluminium-Silicium.
- Cooling effect: Additional cooling effect due to residue-free evaporation ensures longer tool life at higher feed rates and infeeds.
- Explosion risk? even in the event of a malfunction, an explosive atmosphere cannot develop inside the machine at any time. This fact was determined on the basis of the lower explosion limit (UEG) of GRACONOL® and validated in cooperation with an external certification institute.

According to the current guidelines for the Machinery Directive, no ATEX-certified components need to be installed.

- Cleaning: highly clean and dry workpieces can be processed directly, without cleaning requirements.
 Easy and time-saving cleaning of the machine, simply by removing the dry chips.
- ➤ Economical benefits: simple & time-saving cleaning of workpieces & machines. Economic recycling of the aluminum chips without residues with extremely low wastage.
- Sustainability: GRACONOL® is based on a renewable resources and allows the chips to be recycled without any residues.
- ➤ Health: GRACONOL® is free from: Hydrocarbons, chlorine, sulfur, halogens, zinc, phosphoric, boric acid and nitrite compounds. Also free from formaldehyde, amines especially DCHA, diethanolamines, nitrosamines, silicones, heavy metals and triazine compounds (HHT, PCP, PCB, PCT, TCDD).

Technical Data

color	Transparent-clear
Mineral oil	0 %
Water	0 %
Density at 20 C	0,860 g/cm ³
Viscosity at 20 C	1,3 mm ² /s
Flammable	>12 °C

Available units



5, 20, 200 Litre and 1000 Liter IBC



GRACONOL-ECO * is a synthetic, mineral oil- and nitrite-free high-performance universal grinding coolant/concentrate, which is preferred for grinding operations due to its exceptionally good corrosion protection properties. Extreme low foaming ensures smooth monitoring of the grinding processes.

In both soft and hard makeup water, the product provides very good grinding and flushing capabilities with high corrosion protection and long emulsion service life.

- Applications: Surface finishing, such as grinding, deburring, sharpening
- ➤ Materials: GRACONOL-ECO® has been specifically developed for the high-demand grinding of surfaces made of ceramics, steel, cast iron, as well as plastics and non-metals.
- ➤ **Economy:** Since it is a concentrate that is mixed with water at only 6-8%, it offers an extremely economical price per liter.
- Cooling & flushing capability: Extremely good flushing and cooling capabilities with high thermal conductivity.
- ➤ **Tool life:** High technical stability and long service life are guaranteed with proper application.

- > **Texture:** Aqueous emulsion.
- ➤ Concentrations: When mixed with makeup water, you can use the following concentrations as a reference: Cast iron, steel, and aluminum: 6% / Grinding: 10%
- ➤ Shelf life: GRACONOL-ECO® is shelf-stable for 24 months at temperatures between 5° C and 40° C.
- > Explosion risk: No explosion risk according to EU A.14.
- ➤ Viscosity: GRACONOL-ECO® (concentrate) has perfect flow properties, preventing foam formation.

 Viscosity varies depending on concentration.
- ➤ **Health:** Synthetic, skin-friendly, low foaming, and without the addition of halogens.

Tecnical Data

Color	Colorless
Odor	Odorless
PH-level (Gew-%)	7
Moisture content	Fully miscible
Density at 20°C	1,2508 g/cm ³
Viscosity	Depending on concentration
Flashpoint	▶ 120 °C

Packaging units





1, 10, Liter 200 Liter upon request



GRACONOL-WM * is a high-performance cooling lubricant concentrate which ensures outstanding results with maximum economic efficiency due to its high quality and composition.

Its versatility is based on many years of experience in production and constant dialog with our customers, as well as the use of the latest technology and high-quality lubrication components. .

- > **Applicable for**: simple heavy machining. Turning, milling, drilling, sawing.
- Materials: cast iron, steel, high alloy steels, aluminum, Titan and non-metals.
- > Economical benefits: As it is a concentrate mixed with water at only 6-8%, it provides an extremely economical price per liter.
- ➤ Corrosion protection: Very good corrosion protection. At 6% concentration grade 0 (no corrosion) according to DIN 51360/2. Workpiece and machine are very well protected against corrosion. Analytical report field laboratory (12.09.2022)
- Cooling & flushing capacity: Extremely good flushing & cooling capacity with high thermal conductivity.
- > Service life: High technical stability and long service life are guaranteed when used properly.

- > Composition: Aqueous emulsion.
- Concentrations: For mixing with water. Please follow this recommended concentrations: Cast iron, steel and aluminum: 6 %.
 Medium-heavy machining: 8 %.
 Stable emulsions are stable in use up to water hardnesses of 60odH
- > Storage: GRACONOL-WM ® has a minimum lifetime of 12 months at a temperature of 5oC-40OC.
- Health: GRACONOL-WM ® is boron free.
 Explosion risk? No explosion hazard according to EU A.14.
- Viscosity: GRACONOL-WM ® has a very low viscosity, allowing easy flow. Prevents the formation of sludge.

Viscosity 190mm2/S according to DIN ISO 3104

Technical Data

Color	Yellow
Smell	Characteristic
Mineral oil	0 %
Water	0 %
Density 15°C	0,955 g/cm ³
Kin. Viscosity 20 ⁰ C	190 mm ² /s
Flammable	>100 °C

Available Units



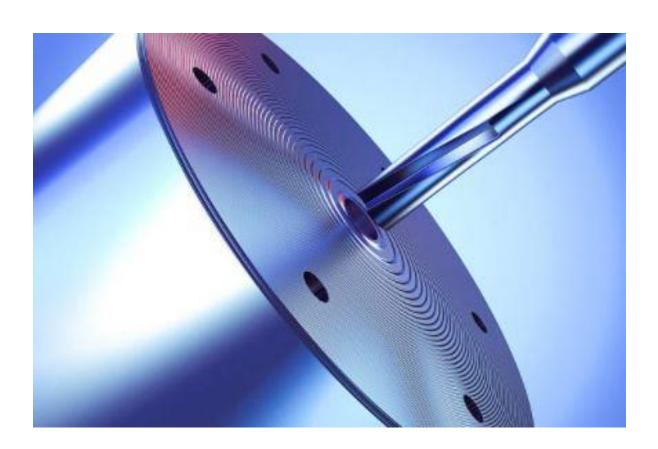
5, 20, 200 Litre, 1000 Liter IBC



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Wünschen Sie einen Demonstrationstermin in Ihrem Haus, haben Sie Fragen zu unseren Produkten oder benötigten Sie ein speziell auf Ihren Bedarf zugeschnittenes Angebot? Dann melden Sie sich bei uns. Wir freuen uns sehr über Ihre Kontaktaufnahme unter Tel.: +49 (0) 6251 / 770 788 - 0 oder per E-Mail unter mail@graconol.com



