Germ-Allcard Wirol 2000 LFG

Copper Wire Drawing Lubricant for Intermediate, Fine and Super Fine Applications

Description

Germ-Allcard Wirol 2000 LFG is a fully synthetic water soluble lubricant which produces a clear blue solution at all dilutions. It is entirely water soluble utilising new technology to provide levels of cleanliness unachievable with oil containing products. Lubrication is provided by high molecular weight polymers supplemented by synthetic soaps. A synergistic combination of organic and inorganic corrosion inhibitors provide complete protection for ferrous and non-ferrous metal alike. Germ-Allcard Wirol 2000 LFG is virtually unaffected by water hardness and will not generate copper sludge. After drawing, the wire is exceptionally clean being washed almost completely dust free by the Germ-Allcard Wirol 2000 LFG solution. The resulting copper dust is readily removed by filtration, centrifuging or gravity separation, and the solution can be filtered down to 1 micron.

Applications

Germ-Allcard Wirol 2000 LFG is recommended for the drawing of intermediate and fine wire sizes of plain and tinned wire on both single and multi-line machines. Germ-Allcard Wirol 2000 LFG is especially recommended for drawing or rolling wire for enamelling. Further specialised applications include the drawing of Nickel plated, Silver plated copper wires and precious metals. Strip and section cold rolling is also possible with Germ-Allcard Wirol 2000 LFG. The optimum operating temperature for the Germ-Allcard Wirol 2000 LFG drawing solution is between 35 to 45 degrees centigrade.

User instructions

1. *Germ-Allcard Wirol 2000 LFG is compatible with certain emulsion type lubricants, however thorough cleaning is recommended by the use of System Cleaners to clean and degrease machinery and pipework to ensure the maximum benefits of Germ-Allcard Wirol 2000 LFG are obtained. To control bacterial and other infections in service and to avoid incompatibility problems, we recommend the use of a biocide. Germ-Allcard Wirol 2000 LFG will perform well in almost all waters but for maximum cleanliness we recommend the use of soft or deionised water to replace evaporation losses. Containers of concentrate should be stored away from extremes of temperature. Above 60˚C Germ-Allcard Wirol 2000 LFG may suffer irreversible damage. Protect from frost and prevent the ingress of water. It must have a temperature above 5°C before emulsion make-up. The correct mixing procedure is to add Germ-Allcard Wirol 2000 LFG concentrate to water and stir. For this operation we recommend positive displacement (Dosatron type) mixing units.*

	Entry diameter (mm)	Recommended concentration
Intermediate	3.5	6-8 %
Fine & super fine	0.4	5-6 %
In line continuous annealers		4 %

Note: In some circumstances, it is beneficial to exceed the recommendations shown above.

Environment, Health and Safety

Please consult the Material Safety Data Sheet for instructions regarding safe handling and environmental issues. Germ-Allcard Wirol 2000 LFG is boron and formaldehyde free. It is compliant with the TRGS 611 specification. This ensures environmental safety & operator health.

Properties

	Method	Unit	Typical
Appearance (Concentrate)	Visual	-	clear blue fluid
Appearance (Emulsion)	Visual	-	clear blue solution
Density, 20 ˚C	D 4052	g/ml	1.08
pH 5% in DI water	E 70	-	9.2
Refractometer Factor	-	-	2.4

The figures above are not a specification. They are typical figures obtained within production tolerances.

Remarks

Please contact your Q8Oils representative for further advice and support on your specific application and equipment.

Sustainability

*The product Carbon Footprint (PCF), cradle-to-gate (Q8Oils state of the art facility in Belgium), of Germ-Allcard Wirol 2000 LFG is **0.96** kg CO_2eq / kg.*
Please contact Q8Oils to learn more about the positive environmental impact, the handprint, of this product.
To ensure accuracy and reliability, the PCF calculation tool has been verified by an independent third party. The verification report is available in the disclaimer.
For more info check here

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