

product data sheet

VARGRIND 6000

High performance fully synthetic metalworking fluid

VARGRIND 6000 is a fully synthetic water-mix grinding fluid that forms a true solution when diluted with water and provides superior cooling and flushing characteristics. This fully synthetic high performance metalworking fluid provides excellent corrosion protection whilst minimising the buildup of 'sticky' residues

VARGRIND 6000 is based upon high performance anti-corrosion additives in order to provide excellent residual corrosion protection of the machine tool and machined components alike. The product forms a true solution which allows for excellent visibility for the machine operator and has a low foaming tendency which allows for use in the most arduous modern day machining requirements

VARGRIND 6000 is an excellent high performance synthetic on all types of steel but is not suited for use on aluminium. This advanced synthetic metalworking fluid will out-perform conventional fluid technology and excels in grinding of ferrous materials in centerless, surface and some profile grinding applications.

VARGRIND 6000 provides both good tool life and surface finish making the product suitable for a whole variety of machining applications whilst maintaining machine cleanliness and excellent operator acceptability and skin compatibility.

Applications

Grinding

General machining

Features & Benefits

Excellent performance characteristics

Chlorine free

Does not form sticky deposits

Suitable on all ferrous materials

Suitable for use in soft to hard water

High performance in arduous operations

High levels of boundary lubrication

Rejects tramp oil

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Typical Operations

Grinding	3% - 5%		
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VARGRIND 6000 Typical Characteristics

Characteristic	Typical Data	Characteristic	Typical Data
Appearance	Green liquid	Emulsion Appearance	Translucent
PH (@ 5% concentration)	9.2	IP287 corrosion breakpoint	2%
Odour	Characteristic	Refractometer conversion factor	2.0

Additional Technical Information

VARGRIND 6000 is a truly versatile water soluble metalworking fluid that can be used across a diverse range of metals, applications and water hardnesses. The performance parameters of VARGRIND 6000 make it an ideal candidate product to be used throughout a machine shop as a high performance general purpose coolant and grinding fluid. If further information is required please consult your local selling agent or Varol Technical Department for further information

Bio-stability - these products give excellent bio-control maintaining bacteria levels well within the HSE (Health and Safety Executive) guidelines.

Corrosion inhibition - These products give equivalent corrosion protection, or better than boron containing products.

For maximum service life, coolant systems should be cleaned and sterilised by treatment with

Varclean System Cleaner. This high performance system cleaner can be used whilst production is continued for up to 24 hours prior to exchange of fluids. Please refer to the **Varclean System Cleaner** data sheet for detailed application information or contact your Varol sales agent.

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Varol Metalworking		Varol Machine Lubricants	
Varcut	Neat cutting oils, high performance, extensive range of viscosities	Varlube S Viscosity 32 - 320	Slideway
Varform	Comprehensive range of neat forming oils, including water extendable versions and vanishing oils	Varmulti Viscosity 32 - 680	Multilube - Slideway, Gear, Hydraulic
Varclean	Aqueous based wash fluids, surface cleaners and solvent degreasers	Vargear Viscosity 68 - 460	Industrial Gear
Varcool & Vargrind	Comprehensive range of high performance water soluble fluids. Low, medium, high oil content and synthetics	Varpress Viscosity 5 - 150	Hydraulic oil range covering zinc containing, zinc free and high VI

Operational Recommendations

VARGRIND 6000 is designed to be mixed with water; it has been developed to exhibit full multi-metal compatibility and is suitable for use in soft and hard water types.

Mix emulsions of **VARGRIND 6000** with water by adding concentrate to water and then mixing or use a suitable proportioning mixer unit, these are available on request. The use of an airline to mix the solution is not recommended. Machine top up may require a weaker dilution than the initial machine charge concentration. Recommended concentrations can vary depending on operations, materials, tooling, coolant pressure, coolant flow. The above information is given for guidance. Please contact your representative for further advice.

VARGRIND 6000 should always be stored indoors and protected from frost. Good standards of hygiene and housekeeping should always be adopted when using any metalworking fluid. A separate SDS is available for this product.

As with all modern cutting fluids, concentration control is of paramount importance, therefore regular check by use of a refractometer is recommended for this product. It should be noted that the individual product refractometer correction factor should always be used to ensure accuracy.