



Industrial
Lubricants



Automotive
Lubricants



Biodegradable
Lubricants



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Cleaning &
Maintenance



Greases &
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Foodsafe
Lubricants



Heritage Oils



Lubrication
Equipment



Metalworking
Fluids



Microgrind X-LF

Full Synthetic Boron & Formaldehyde Free Soluble Grinding Fluid

Product Code: HS0146

Product Description

Pennine Microgrind X products represent a range of boron and formaldehyde release biocide free new generation soluble metalworking fluids designed to comply with existing and pending REACH regulations offering the highest levels of health, safety and environmental compliance.

Pennine Microgrind X-LF is a full synthetic boron and formaldehyde release biocide free grinding fluid which produces a transparent solution when mixed with water, offering excellent workpiece visibility. The product is an oil free solution offering excellent wetting, cooling and flushing properties which helps to prevent grinding wheels from clogging or glazing. Microgrind X-LF is low odour, very low foaming and has outstanding resistance to bacterial and fungal degradation.

Applications

Pennine Microgrind X-LF is recommended for surface grinding, cylindrical grinding, centreless grinding, and tool and cutter grinding on both ferrous and non-ferrous materials, including yellow metals and aluminium alloys. The product can also be successfully used for grinding ceramics and glass. Microgrind X-LF offers outstanding low foam properties and is suitable for use in applications with ultra fine filtration.

Features & Benefits

- | | | |
|----------------------------------|---|--|
| • Transparent solution | ~ | Excellent workpiece visibility |
| • Highly biostable | ~ | Extended sump life / fewer fluid changes |
| • Excellent tramp oil rejection | ~ | Maintains fluid cleanliness |
| • Excellent corrosion protection | ~ | Protects machines & workpieces |
| • Boron & formaldehyde free | ~ | Excellent EHS profile |
| • Ultra low foam | ~ | Eliminates the need for tank side antifoam |



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Typical Test Data

Characteristic / Test	Data
Appearance (concentrate)	Pale Liquid
Appearance (emulsion)	Transparent
Specific Gravity @ 15°C	1.08
pH @ 5%	9.7
IP 287 Breakpoint Corrosion	2.5%
IP 125 Herbert Corrosion Test	N/A
Dilution Range (min ~ max)	3 ~ 6 %
Refractometer Conversion Factor	2.9
Water Hardness Range ppm CaCO ₃ (min ~ max)	50 ~ 450

Actual dilution rates may vary depending on application. Please consult with Technical Services to determine the most suitable dilution for your application.

Coolant Care

To promote maximum service life, it is strongly advised that coolant systems are thoroughly sterilised with Bioflush System Cleaner prior to coolant changes (see Bioflush Technical Data Sheet for further information and guidelines).

To maintain the efficiency of the coolant, daily checks for concentration with a hand refractometer is recommended. Maintaining a consistent concentration is paramount to prolonging the fluid sump life. Further tests for bacteria, fungus, pH and tramp oil contamination are available through our PROCARE Fluid Management Service and helps users to comply with current HSE legislative requirements. Please contact us for further details.

Availability & Storage

Pennine Microgrind X-LF is available in 1000 litre IBC's, 205 litre barrels, and 25 litre drums.. Barrels of lubricant should always be stored in such a way that will prevent the ingress of water when stored in the open. Protect from frost.

Health and Safety

Please refer to the relevant Safety Data Sheet, a copy of which is freely available to all our customers.

Data represented is typical of that obtained with normal production tolerances and does not constitute a specification. The policy of Pennine Lubricants is one of continual improvement; we therefore reserve the right to change specifications without notice.

