



Industrial Lubricants



Automotive Lubricants



Biodegradable Lubricants



Agricultural Lubricants



Cleaning & Maintenance



Greases & Pastes



Foodsafe Lubricants



Heritage Oils



Lubrication Equipment



Metalworking Fluids



Ultrasol X-2102

Multipurpose Semi Synthetic Metalworking Fluid

Product Description

Pennine Ultrasol X products represent a range of new generation soluble metalworking fluids free from boron, formaldehyde release biocides, DCHA and chlorinated paraffins designed to comply with existing and pending REACh regulations offering the highest levels of health, safety and environmental compliance.

Ultrasol X-2102 is a semi synthetic soluble metalworking fluid incorporating carefully balanced levels of mineral oils and synthetic esters producing a semi translucent emulsion when mixed with water. Ultrasol X-2102 offers excellent resistance to bacterial and fungal infections providing improved sump life, reduced objectionable odours and fewer fluid clean outs compared to traditional soluble oil emulsions. The product has good low foam properties and is suitable for use in soft to moderately hard make up waters.

Applications

Ultrasol X-2102 is recommended for low to medium duty operations on a variety of ferrous and non ferrous materials including cast iron, mild steel and stainless steel along with certain grades of aluminium and yellow metals. Typical applications include turning, milling, drilling and grinding.

Features & Benefits

- | | | |
|--|---|--|
| • Boron & formaldehyde biocide free | ~ | Improved EHS profile |
| • Biostable emulsion | ~ | Extended sump life / fewer fluid changes |
| • Low foaming | ~ | Reduced anti-foam additions |
| • Chlorine free | ~ | Improved environmental profile |
| • Suitable for soft & hard make up water | ~ | Low foam and soap scum formations |
| • Multifunctional performance | ~ | Ideal rationalisation grade |





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Typical Test Data

Characteristic / Test	Data
Appearance (concentrate)	Amber
Appearance (emulsion)	Semi Translucent
Specific Gravity @ 15°C	0.976
pH @ 5%	9.5
IP 287 Breakpoint Corrosion	2.5 %
IP 125 Herbert Corrosion Test	N/A
Dilution Range (min ~ max)	4 ~ 10 %
Refractometer Conversion Factor	1.72
Water Hardness Range ppm CaCO3 (min ~ max)	50 ~ 350

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 Ultrasol X-2102 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.

