



Industrial
Lubricants



Automotive
Lubricants



Biodegradable
Lubricants



Agricultural
Lubricants



Cleaning &
Maintenance



Greases &
Pastes



Foodsafe
Lubricants



Heritage Oils



Lubrication
Equipment



Metalworking
Fluids



Pencool S204

High Lubricity Chlorine Free Metalworking Fluid

Product Code: AHP

Product Description

Pencool S204 is a very high lubricity soluble metalworking fluid incorporating the latest chlorine free extreme pressure technology producing a heavy duty, very low foaming, ultra robust, long sump life emulsion suitable for use in the most arduous machining and grinding applications where superior surface finish and tool life are required. The chlorine free technology and excellent detergency ensures reduced sticky deposits and excellent machine cleanliness. Pencool S204 incorporates a highly effective fungicide and the very latest biostable technology ensuring a long and trouble free service life and reduced need for secondary treatments with tank side additives thus offering improved health and safety attributes.

Applications

Pencool S204 has been developed to have true “multi metal” compatibility making it an ideal rationalisation product where a wide range of materials are machined. However, due to the exceptional levels of lubricity exhibited, Pencool S204 is particularly suited to machining and grinding applications where outstanding surface finish and maximised tool life are required in particular the machining of sensitive aerospace grade aluminium's and the machining of titanium, nickel alloys, and other exotic materials. Pencool S204 is also suitable for use in applications where a very low foaming product is required such as through spindle coolant employed on modern CNC machines and areas with very soft make up water as the product has very low foaming characteristics.

Features & Benefits

- | | |
|-----------------------------|--|
| • Exceptional lubricity | ~ Improved tool life and surface finish |
| • Highly biostable | ~ Extended sump life / fewer fluid changes |
| • Multi metal compatibility | ~ Allows for grade rationalisation |
| • Very low foaming | ~ Reduced need for antifoam additions |
| • Improved detergency | ~ Maintains machine cleanliness |
| • Chlorine free | ~ Reduced disposal costs |



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Pencool S204 *continued*

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Typical Test Data

Characteristic / Test	Data
Appearance (concentrate)	Amber Liquid
Appearance (emulsion)	Milky White
Specific Gravity @ 15°C	0.94
pH @ 5%	9.3
IP 287 Breakpoint Corrosion	2.0 %
IP 125 Herbert Corrosion Test	N/A
Dilution Range (min ~ max)	4 ~ 12 %
Refractometer Conversion Factor	1.0
Water Hardness Range ppm CaCO ₃ (min ~ max)	50 ~ 500

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 Pencool S204 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. of Pennine Lubricants is one of continual improvement; we therefore reserve the right to change specifications without notice.

