ECOCOOL ULTRALIFE M
Semi-synthetic water soluble cutting fluid

ECOCOOL ULTRALIFE

“Advanced coolantology” is a concept developed by Fuchs Lubricants (UK) plc to describe the new and advanced development in metalworking fluid technology…the FUCHS ECOCOOL ULTRALIFE range.

The ECOCOOL ULTRALIFE range was developed through co-operative research between leading UK manufacturers and FUCHS’ expert team of engineers and chemists*; to develop a range of “best in class” coolants compared to other leading UK brands**.

ECOCOOL ULTRALIFE products were developed in response to HSE guidelines regarding working safely with metalworking fluids***, to offer products with extended sump life, exceptional resistance to bacterial growth and requiring minimal to zero maintenance.

As part of the development process, ECOCOOL ULTRALIFE products were developed to show industry leading performance in areas of tramp oil rejection, detergency, lubricity, compatibility with modern tooling, low foaming and corrosion protection to offer users guaranteed improvements in coolant performance and management.

Application

ECOCOOL ULTRALIFE M was designed for general machining and grinding on a wide variety of ferrous and non-ferrous materials including medium to high tensile steels.

Advantages/Benefits

- Semi-synthetic formulation
- Environmentally improved - does NOT contain sodium nitrite, phenols, triazene, PTBBA or chlorinated additives
- Offers “best in class” performance in comparison to leading UK products
- Extended sump life compared to conventional fluids
- Proven to offer exceptional resistance to bacterial growth
- Developed with leading UK manufacturers
- Optimum tool life
- Good corrosion protection even at low concentrations
- Excellent lubrication to cutting operation and machine fixtures, slides etc
- Excellent surface finish quality and improved component finish
- Excellent tramp oil rejection characteristics

Other Services

A comprehensive range of coolant monitoring and maintenance systems are available from FUCHS Lubricants UK, incorporating coolant dispensing, recycling and disposal equipment.

Storage

Soluble oil concentrates may be damaged by frost.
Store indoors at ambient temperatures.
Machine Cleaning
To optimise service life, the machine should be flushed thoroughly using RENOCLEAN SMC (see separate data sheet) prior to recharging with fresh fluid.

Coolant Monitoring
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.

CHARACTERISTICS (Concentrate): ECOCOOL ULTRALIFE M

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Unit</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Hazy amber fluid</td>
<td></td>
</tr>
<tr>
<td>Specific gravity at 15.6ºC</td>
<td>0.978</td>
<td>IP160</td>
</tr>
<tr>
<td>Low temperature stability test -2ºC</td>
<td>Stable</td>
<td></td>
</tr>
</tbody>
</table>

CHARACTERISTICS (Emulsion): ECOCOOL ULTRALIFE M

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Unit</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Opaque</td>
<td></td>
</tr>
<tr>
<td>pH value at 5%</td>
<td>9.2</td>
<td></td>
</tr>
<tr>
<td>Corrosion filterchip</td>
<td>%</td>
<td>1.5 break point IP287</td>
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<tr>
<td>Recommended concentrations:</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>General machining</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Grinding</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Refractometer correction factor</td>
<td>1.2</td>
<td></td>
</tr>
</tbody>
</table>

Note: Refractometer Reading x Correction Factor = Actual Concentration

* ask for copies of case study documentation
** ask for copies of research and development work
*** ask for a copy of the HSE guide from FUCHS

Health, Safety and Environment - information is provided for products in the relevant Safety Data Sheet. This provides guidance on potential hazards, precautions and first-aid measures, together with environmental effects and disposal of used products.

While the information and figures given here are typical of current production and conform to specification, minor variations may occur. No warranty expressed or implied is given concerning the accuracy of the information or the suitability of the products.