KOOLRite 2290 is a new generation of oil-based cutting fluid that utilizes JTM’s unique BioArmor Technology to give you a coolant with outstanding control of bacteria without the use of bactericides. With BioArmor protection, KOOLRite 2290 will stop sump odors, give you exceptionally long sump life and a clean, comfortable, safe work environment for machine operators.

KOOLRite 2290 does not contain chlorine or sulfur and yet with the use of new technology, it is designed for on all metals and operations including heavy duty operations on tough alloys where extreme pressure is required.

Unlike competitive oil-based coolants, KOOLRite 2290 will reject tramp oils allowing clean coolant to be delivered to the chip/tool interface keeping your machine tool clean with a minimum of residual film, while providing excellent corrosion control.

KOOLRite 2290 will provide twice the sump life than the soluble oil you presently use or your purchase is FREE!

Superior Performance
Unique Microemulsion Coolant

BioArmor Technology means built-in resistance to bacterial growth without the use of bactericides. Only KOOLRite has it!

THE KOOLRite CHALLENGE:
KOOLRite 2290 will provide twice the sump life than the soluble oil you presently use or your purchase is FREE!
Recommended Starting Dilutions

<table>
<thead>
<tr>
<th>Operations</th>
<th>Iron &amp; Carbon Steel</th>
<th>High Alloy &amp; Stainless Steels</th>
<th>Tool Steels</th>
<th>Aluminum</th>
<th>Copper Alloys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grinding</td>
<td>4% to 5%</td>
<td>4% to 6%</td>
<td>5% to 6%</td>
<td>5% to 7%</td>
<td>4% to 5%</td>
</tr>
<tr>
<td>Milling, Drilling, Turning, Cut-off, Sawing, Screw Machining</td>
<td>5% to 7%</td>
<td>7% to 8%</td>
<td>6% to 8%</td>
<td>5% to 7%</td>
<td>5% to 7%</td>
</tr>
<tr>
<td>Tapping, Reaming, Broaching and Form Milling</td>
<td>5% to 7%</td>
<td>8% to 10%</td>
<td>8% to 10%</td>
<td>8% to 10%</td>
<td>5% to 7%</td>
</tr>
</tbody>
</table>

Directions for Use

The sump life of this coolant, as with any other coolant, will be greatly enhanced if charged to a clean system. You can utilize JTM’s Sump Cleaner to disinfect your sump. KOOLRite 2290 can be metered through automatic dispensing systems available from JTM. Contact your representative regarding cleaning procedures and dispensers. **Always add the KOOLRite 2290 concentrate to the water and not the water to the concentrate.** Proper maintenance in removing extraneous oils is beneficial for extended coolant life. The concentration can be monitored by refractive index.

Refractive Index ………….1.3 (Refractive reading x 1.3 = % of concentration of dilution)

Product Data

**Appearance:**
- Concentrate: Opaque Amber
- @ 10% Dilution: Milky

**pH (concentrate):** 9.3

**pH (10% dilution):** 9.1

**Density (lbs/gal):** 8.3

Material Safety Data Sheets are available for all products. All reasonable care has been taken to ensure that the above information is accurate as of the date of printing.

JTM Products, Inc. offers a complete line of Chemicals and Lubricants for Industry. Call us at 800-229-6744

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