



## **OAK KOOL<sup>®</sup> 647**

### **SYNTHETIC METALWORKING FLUID**

<b>APPLICATIONS</b>	<p><b>Oak Kool 647</b> is a versatile synthetic metalworking fluid developed as a cost effective, high performance general purpose machining and grinding fluid. <b>Oak Kool 647</b> is formulated to provide the lubricity, heat dissipation, foam control and long sump life expected from more expensive synthetic metalworking fluids. <b>Oak Kool 647</b> is capable of handling all types of general-purpose operations from grinding to tapping, reaming, broaching and milling.</p> <p><b>Oak Kool 647</b> is recommended for:</p> <ul style="list-style-type: none"><li>• Individual sump, as well as, central systems.</li><li>• All types of machining and grinding operations on ferrous metals.</li><li>• Problem systems that have a history of poor coolant longevity.</li><li>• Systems where enhanced tramp oil removal is desirable.</li></ul>
<b>COMPETITIVE ADVANTAGES</b>	<ul style="list-style-type: none"><li>• Economical to use.</li><li>• Excellent lubricity and extreme pressure characteristics.</li><li>• Low foaming.</li><li>• Superior tramp oil rejection.</li><li>• Clean operating with good worker acceptance.</li><li>• Low maintenance costs.</li></ul>

<p><b>GETTING STARTED</b></p>	<p><b>FOR INDUSTRIAL USE ONLY</b>  Clean sump with Oak Sump Kleen. <b>Oak Kool 647</b> is designed to be used diluted in water at concentrations ranging from 5% to 15% (1:20-1:7) depending on the severity of the operation. Concentration can be easily monitored by a refractometer. Contact your Oak Representative for proper recommendations regarding cleaning procedure, dispensers and refractometers.</p> <p>Add no other substances to the concentrate or mix unless approved by your OAK Representative. Not recommended for use with magnesium or alloyed magnesium.</p>
<p><b>TYPICAL PHYSICAL AND CHEMICAL PROPERTIES</b></p>	<p><b>Physical state:</b> Liquid  <b>Appearance and odor:</b> Clear, bland  <b>Color available:</b> Blue/Green  <b>Solubility in water:</b> Complete  <b>Weight, lb/gal, 60°F (15.6°C):</b> 8.9  <b>Specific gravity, (H<sub>2</sub>O = 1):</b> 1.07  <b>Boiling point, °F (°C):</b> 212 (100)  <b>Flash point, COC, °F (°C):</b> None, Self Extinguishing  <b>Extinguishing media:</b> N/A  <b>Unusual fire &amp; explosion hazards:</b> None  <b>pH, concentrate:</b> 9.4  <b>pH, 5.0% mix, typical operating conditions:</b> 8.6  <b>Total chlorine, wt%, calculated:</b> 0.00  <b>Total sulfur, wt%, calculated:</b> 0.00  <b>Silicones:</b> None</p>
<p><b>PACKAGING</b></p>	<p><b>Available in 5-gallon pails, 55-gallon drums and bulk containers.</b></p>
<p><b>REFRACTOMETER FACTOR = 2.1</b> Multiply the scale reading obtained on most refractometers by the <b>Refractometer Factor</b> to obtain the mix concentration in percent.</p>	
<p><b>NOTE: Calibrate the refractometer so that it reads 0.0 with water, before testing the sample mix. Remove gross contaminants from the sample mix, before testing.</b></p>	
<p>For additional information concerning <b>OAK KOOL 647</b>, refer to its OSHA MSDS or contact OAK INTERNATIONAL at 1-269-651-9790.</p>	
<p><b>WARRANTY:</b> Oak International, Inc. will grant credit on any product which proves defective in material or workmanship as determined by us subject to the following conditions: all material is subject to our inspection prior to issuing credit; any refund will be adjusted based on the volume of product used; no credit will be granted for used or unused product(s) over one year old as determined by the batch number. The terms in this warranty do not in any way extend to any product thereof covered by this agreement, which has a life, under normal usage, inherently shorter than the one year period indicated above. Except as set forth expressly in writing herein, there are no other warranties express or implied in respect of any product. No warranty of merchantability or fitness for purpose shall apply.</p>	
<p><b>LIMITATION OF LIABILITY:</b> Under no circumstances shall we or any affiliate of ours have any liability whatsoever for loss of use or for any indirect or consequential damages.</p>	
<p><b>Minor formulation changes or normal variations in the manufacture of this product may cause slight variances in the data presented on this sheet. 5/3/07 REV</b></p>	