



# YOUR METALWORKING FLUID SOLUTIONS FOR SOLUTIONS

## OAKFLO<sup>®</sup> DSY 4100

SYNTHETIC, METALWORKING FLUID CONCENTRATE

<p><b>APPLICATIONS</b></p>	<p><b>OAKFLO<sup>®</sup> DSY 4100</b> metalworking fluid is an extremely low foaming, clear, biostable synthetic.</p> <p><b>Metals:</b> Cast Iron, Nodular Iron, Carbon Steels</p> <p><b>Duty Range:</b> For light to moderate-duty operations.</p>
<p><b>FEATURES &amp; BENEFITS</b></p>	<p><b>OAKFLO<sup>®</sup> DSY 4100</b> is especially well-suited for applications where a clear fluid and foam control are critical, such as roll grinding and surface grinding. It can also be used in central systems and individual machines on ferrous applications. It is stable in both hard and soft water.</p> <p><b>RANCIDITY CONTROL</b> – Exceptionally good bacteria and mold control.</p> <p><b>CLEANLINESS</b> – Excellent clarity and cleanliness – Emulsifies very little tramp oil – Tramp oil floats on top of the mix and can be removed easily by an oil skimmer.</p> <p><b>EXCELLENT FOAM CONTROL</b> – Even in operations with high agitation.</p> <p><b>EXCELLENT SETTLING PROPERTIES</b>- Cast iron and graphite finds settle readily – Mix stays clean – Finish marring chips and grit do not recirculate throughout the system.</p> <p><b>DEPLETION RESISTANT</b> – Lean make-up keeps the concentration at the recommended dilution since it is not easily degraded by bacteria, or depleted by high chip loads – Reduces costs by reducing amount of concentrate required for makeup.</p> <p><b>OPERATOR &amp; MACHINE FRIENDLY</b> – Pleasant to use – Does not smoke or leave a slippery, oily film on parts, machines or surrounding areas – Stable and transparent.</p> <p><b>CORROSION CONTROL</b> – Excellent rust control on cast iron and steel due to its unique proprietary combination of rust inhibitors.</p>

**RECOMMENDED  
STARTING  
DILUTIONS**

**FOR INDUSTRIAL USE ONLY**

**Recommended Starting Dilution: 5% (1:20)**  
**Typical Operating Range: 5%- 10% (1:20 to 1:10)**

**OAKFLO® DSY 4100** is to be mixed with water for use (add concentrate to water).

Add no other substances to the concentrate or mix unless approved by Oak Signature Technical Services. Not recommended for use with magnesium or alloyed magnesium.

**For concentration analysis, use** the Total Alkalinity Titration Procedure, BCG Titration Procedure, CIMCHEK™ Test Strip, or Refractometer.

**TYPICAL  
PHYSICAL AND  
CHEMICAL  
PROPERTIES**

**Physical state:** Liquid  
**Appearance and odor:** Clear / Chemical  
**Colors available:** Undyed, Blue  
**Solubility in water:** 100% Miscible  
**Weight, lb/gal, 60°F (15.6°C):** 8.73  
**Specific gravity, (H<sub>2</sub>O = 1):** 1.046  
**Boiling point, °F (°C):** 212 (100.0)  
**Flash point, COC, °F (°C):** None, Self extinguishing  
**Fire point, COC, °F (°C):** None, Self extinguishing  
**Freezing point (or pour point), °F, (°C):** 24 (-4)  
If frozen, thaw completely at room temperature.  
**pH, concentrate:** 9.7  
**pH, 5.0% mix, typical operating conditions:** 9.0  
**Total chlorine/chloride, wt%, calculated:** 0.00/<50 ppm  
**Total sulfur, wt%, calculated:** 0.00  
**Silicone:** None

**PACKAGING**

**Available in 5-gallon pails, 55-gallon drums, and bulk containers.**

**REFRACTOMETER FACTOR: 4.2**

Multiply the scale reading obtained on your OAK SIGNATURE® Refractometer by this factor to obtain the mix concentration in percent. Calibrate the refractometer so that it reads 0.0 with water before testing the sample mix. Remove gross contaminants from the sample mixes before testing. A refractometer is only recommended for use in checking the concentration on a fresh charge.

**SAFETY DATA SHEET**

Available at [www.cimcool.com](http://www.cimcool.com)

For additional information refer to its OSHA MSDS, website or contact your local OAK SIGNATURE SPECIALIST OR DISTRICT MANAGER, or you may contact OAK SIGNATURE® Technical Services at 1-513-458-8199

***Limitation of Liability: 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. Minor formulation changes or normal variations in the manufacture of this product may cause slight variances in the data presented on this sheet.***

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