



OAK INTERNATIONAL
Global Metalforming Fluids

OAK DRAW[®] 943-A

STAMPING AND DRAWING OIL

APPLICATIONS	<p>Oak Draw 943-A is a heavy-duty metalforming lubricant. Oak Draw 943-A offers both extreme pressure and hydrodynamic lubrication providing excellent anti-weld, anti-wipe properties. Oak Draw 943-A is a viscous lubricant, which “clings” to the metal surface.</p> <p>Oak Draw 943-A performs well on a multitude of metalforming processes. These processes include:</p> <ul style="list-style-type: none">• Punching• Forming• Bending• Blanking• Deep Drawing• Piercing• Extruding <p>Oak Draw 943-A is the product of choice for those really “tough” draws on alloy steels and other difficult to form metals.</p>
COMPETITIVE ADVANTAGES	<ul style="list-style-type: none">• Superior tool and die life.• Excellent anti-wipe, anti-weld properties.• Heavy viscosity ensures maximum drawability.• Non-staining lubricant film protects metal surface.• Easily removed in Oak International cleaners.• Good corrosion protection.

<p>GETTING STARTED</p>	<p>FOR INDUSTRIAL USE ONLY Oak Draw 943-A is used as received or diluted with a light oil-based Oak Draw product. Oak Draw 943-A can be applied by spray, drip, flood or roll coat methods.</p> <p>Add no other substances to the concentrate or mix unless approved by your OAK Representative.</p>
<p>TYPICAL PHYSICAL AND CHEMICAL PROPERTIES</p>	<p>Physical state: Thick liquid Appearance and odor: Clear, chemical Color available: Dark amber Solubility in water: Insoluble Weight, lb/gal, 60°F (15.6°C): 9.1 Specific gravity, (H₂O = 1): 1.09 Viscosity SUS, 100°F: 2500 Boiling point, °F (°C): Not determined Flash point, COC, °F (°C): > 350 (> 176.7) Extinguishing media: CO₂, foam, dry chemical Unusual fire & explosion hazards: None Freezing Point or Pour point °F (°C): 5 (-15) If frozen, thaw completely at room temperature prior to use. pH, concentrate: Not applicable Total chlorine, wt%, calculated: 24 Total sulfur, wt%, calculated: 0.5 Silicones: None</p>
<p>PACKAGING</p>	<p>Available in 5-gallon pails, 55-gallon drums and bulk containers.</p>
<p>For additional information concerning OAK DRAW 943-A, refer to its OSHA MSDS or contact OAK INTERNATIONAL at 1-269-651-9790.</p> <p>WARRANTY: 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>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.</p> <p>Minor formulation changes or normal variations in the manufacture of this product may cause slight variances in the data presented on this sheet. 11/29/07 REV</p>	

Oak International, Inc., 1160 White St., Sturgis, MI 49091
Ph. 269-651-9790 Fax 269-651-7849 www.oakinternational.com