



OAK INTERNATIONAL
Global Metalforming Fluids

OAK PROTECT[®] 403

SOLUBLE OIL CORROSION PREVENTATIVE CONCENTRATE

APPLICATIONS	<p>OAK PROTECT 403 is a water-emulsifiable, long-term, indoor corrosion inhibitor for ferrous and non-ferrous metals. It is designed to deposit a thin, oily film that is removable in an aqueous OAK cleaner or by vapor degreasing.</p> <p>OAK PROTECT 403 will provide up to 12-18 months indoor corrosion inhibition depending on concentration used, humidity and air temperature. OAK PROTECT 403 may be applied by airless spray, dipping or brush methods. When practical, dipping is preferred since it assures complete coverage. OAK PROTECT 403 is an ideal choice for final rinse after spray or immersion cleaning, for shipping packaged machine components, engine parts, compressor housings, castings etc., and for indoor storage of all metal parts.</p>
COMPETITIVE ADVANTAGES	<p>EXCELLENT LONG-TERM INDOOR CORROSION INHIBITION</p> <p>EASILY CLEANABLE WITH EITHER AQUEOUS OAK CLEANERS OR VAPOR DEGREASING</p> <p>FAST DRYING FORMULATION – Requires no heating</p> <p>EXCELLENT RESISTANCE TO HIGH HUMIDITY AND ACID ATMOSPHERES</p> <p>ECONOMICAL – concentrated product can be diluted for low end-use cost</p> <p>TRANSPARENT COATING ALLOWS VISUAL INSPECTION OF PARTS AND/OR IDENTIFICATION MARKINGS</p> <p>CAN BE APPLIED DIRECTLY TO WET METAL SURFACES</p>

<p>GETTING STARTED</p>	<p>FOR INDUSTRIAL USE ONLY Use diluted between 5-20 vol.% with water. When mixing, add product to water. Metal parts should be thoroughly cleaned before applying OAK PROTECT 403. After application, the water should be allowed to fully evaporate before the parts are handled, packaged and stored. The deposited protective film, although fast drying, will dry faster with increased air temperature and circulation.</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>TYPICAL PHYSICAL AND CHEMICAL PROPERTIES</p>	<p>Physical state: Liquid Appearance and odor: Clear, bland Color available: Bright amber Solubility in water: 100% miscible Weight, lb/gal, 60°F (15.6°C): 7.7 Specific gravity, (H₂O = 1): 0.9 Flash point, COC, °F (°C): > 320 (> 160) Extinguishing media: CO₂, dry chemical, foam Unusual fire & explosion hazards: None Freezing point (or pour point), °F, (°C): Not determined If frozen, thoroughly thaw prior to using. pH, 5.0% mix, typical operating conditions: 9.3 Total chlorine, calculated: 0.00 Total sulfur, wt%, calculated: Negligible Mercurials, phenols, phosphates, PCB's, PTBBA, nitrate, diethanolnitrosamine, chlorinated paraffins, chlorinated solvents: None Silicones: Yes Residual film: Thin, oily</p>
<p>PACKAGING</p>	<p>Available in 1-gallon jugs, 5-gallon pails, 55-gallon drums.</p>
<p>REFRACTOMETER FACTOR = 1 Multiply the scale reading obtained on most refractometers by the Refractometer Factor to obtain the mix concentration in percent.</p> <p>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.</p> <p>For additional information concerning OAK PROTECT 403, 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. 12/12/07 REV</p>	