

Birchwood Laboratories LLC 7900 Fuller Road Eden Prairie, MN 55344 Tel: 952 937 7931

Fax: 952 937 7979

www.birchwoodtechnologies.com

# **OXYPRIME**® **XP** Primer/Prep (Patented)

**Operating Instructions** 

### PRODUCT DESCRIPTION

OXYPRIMEE® XP Primer/Prep is used to apply a base coat, or primer coat, on ferrous metal surfaces in preparation for blackening by TRU TEMP® Low Temperature Black Oxide. This product is the Extra Strength version of OXYPRIME® XP needed for blackening hardened tool steels or for removing rust and scale. OXYPRIME® XP Primer/Prep operates at Room Temperatures in most installations, but can be heated as high as 140° F, if necessary, to increase its activity on non-reactive alloys, such as high speed steels, or parts with heavy surface rust or scale. OXYPRIME® XP operates as a semi-permanent bath and can be controlled by a color-change test kit.

## **OPERATING CONDITIONS**

Bath Make-Up Concentration 16 – 24 oz/gal for non-scaly parts

2 lb/gallon for descaling parts

Operating Temperature  $70 - 140^{\circ} \text{ F}$ Immersion Time 5-10 minutes.

Equipment Construction Tank: Polypro or acidproof

Heater: Teflon

Ventilation Desirable if solution is heated.

### PROCESS SEQUENCE

The OXYPRIME® XP Primer/Prep is used as part of a multi-step blackening process, as follows:

- 1. **CLEAN** the metal parts by soaking in PRESTO KLEEN<sup>®</sup> HP alkaline cleaner (mixed at 8 oz/gallon; operated at 150° F; 5-8 minutes). Or, use other cleaning methods appropriate to the part condition, bead blasting, shot peening, etc., to remove surface soils and oxides.
- 2. **RINSE** in clean water; 30 seconds.
- 3. **APPLY PRIME COAT** by immersing parts in OXYPRIME® XP solution (operated at 70-140° F, for 5-8 minutes).

- 4. **RINSE** in clean water; 30 seconds.
- 5. **BLACKEN** in TRU TEMP® Black Oxide bath (operated at 200-205°F; 10-15 minutes).
- 6. **RINSE** in clean water; 30 seconds.
- 7. **SEAL** in a rust preventive appropriate to the end-use of the parts, such as: DRI-TOUCH<sup>®</sup> AMBER IRP2 rust preventive for a soft waxy finish; Or in SHEATH<sup>®</sup> RB1 water-displacing oil, for a slightly oily finish; Or in SHEATH<sup>®</sup> WS12 water-soluble oil for fast-drying, slightly oily finish.

#### **BATH MAINTENANCE**

The OXYPRIME\* XP solution can be maintained by testing for total acid content, using the Go/NoGo Test Kit (available from Birchwood Technologies®). As the bath works, the acid content will gradually diminish and the solution will pick up small amounts of dissolved iron from the parts being processed. Normal maintenance calls for periodic additions of OXYPRIME® XP powder. The bath should be changed out periodically, depending on work load. Your Birchwood Technologies\*representative can guide you on process design and solution maintenance.

#### PACKAGING AND STORAGE

40 pound and 400 pound non-returnable drums. Store in closed containers.

Before Using This Product – Please Read, Understand and Follow all the Precautions shown on the Product Label and on the Safety Data Sheet.

The Safety Data Sheet can be found on our website: www.birchwoodtechnologies.com

Use Appropriate Warning Labels on any Container used to Store or Apply this Product.

<u>NOTE:</u> The information contained herein is provided in good faith and is believed to be correct as of the date below. However, Birchwood Laboratories LLC makes no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for a particular purpose. Accordingly, Birchwood Laboratories LLC will not be responsible for damages of any kind resulting from the use of or reliance upon such information.

OXYPRIME® XP Primer/Prep © Birchwood Laboratories LLC 07/2015

(Product Numbers 880560, 880575)