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**OXYPRIME® LIQUID Primer/Prep**  
Operating Instructions

**PRODUCT DESCRIPTION**

OXYPRIME® LIQUID Surface Conditioner is a mildly acidic solution used to apply a primer coat on tool steel or polished surfaces in preparation for blackening by TRU TEMP® black oxide. Supplied as a liquid concentrate, Oxyprime is mixed with water to form an immersion solution. The product works by carrying out a chemical reaction with the surface of the metal, forming a frosty, gray deposit that acts as a reactive base for the secondary blackening reaction to follow. Oxyprime surface conditioner operates as a semi-permanent bath and can be controlled by a Go/No Go test kit.

**OPERATING CONDITIONS**

Initial Bath Make-up	5-10% by volume; room temp operation.
Immersion Times	2-10 minutes, as needed.
Equipment Construction	Tank: Polypropylene or acid-proof. Racks, baskets: Polypropylene or acid-proof.
Ventilation	Not Required. No fumes.
Recirculation	Desirable on tanks over 100 gallons. Use a CPVC recirculating pump or air sparger

**PROCESS SEQUENCE**

OXYPRIME® LIQUID surface conditioner is used as part of a multi-step blackening process, as follows:

1. CLEAN the metal parts by soaking in PRESTO KLEEN® HP, mixed at 8 – 12oz/gal and operated at 150° F. Typical immersion time of 8 minutes.
2. RINSE thoroughly in clean water; 30 seconds.
3. APPLY PRIMER COAT by immersing parts in OXYPRIME® LIQUID solution at room temperature for desired time or until parts have taken on a thin, frosty gray appearance, usually about 2 – 10 minutes.
4. RINSE in clean water; 30 seconds.

5. BLACKEN in TRU TEMP<sup>®</sup> low temperature black oxide bath 200-205° F. 15 minutes.
6. RINSE in clean water; 30 seconds.
7. SEAL in DRI TOUCH<sup>®</sup> AMBER IRP2 rust preventive or other appropriate topcoat sealant.

*Note: Excessive immersion times in the OXYPRIME<sup>®</sup> LIQUID solution lead to smutty black coatings. The objective is to use the minimum time needed to develop a clean black finish.*

### **BATH MAINTENANCE**

The OXYPRIME<sup>®</sup> LIQUID solution can be maintained by testing with the Go/No Go Test Kit, available from Birchwood Technologies<sup>®</sup>, to determine bath strength and proper additions. The bath slowly absorbs iron from the parts being processed. As the iron level increases, the action of the OXYPRIME<sup>®</sup> LIQUID solution becomes slower. The bath should be changed out and replaced with a fresh makeup every 3 – 6 months, in most cases. The spent bath is normally sewerable, after pH adjustment.

### **PACKAGING**

5 and 55 gallon plastic, non-returnable containers. Store indoors in closed container.

***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:**

**<https://www.birchwoodtechnologies.com/Downloads/Safety.html>**

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

**NOTE:** 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<sup>®</sup> LIQUID Surface Conditioner

(Part Numbers 610051, 610058)

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