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**LUMIPRIME® Primer/Prep (Patented)**  
Operating Instructions

**PRODUCT DESCRIPTION**

LUMIPRIME® Primer/Prep is an alkaline surface conditioner used to apply a base coat, or primer coat, on aluminum substrates in preparation for blackening in the LUMICLAD® Black Oxide process. Supplied as a liquid concentrate, the product is mixed with water and used at Room Temperature and is effective on all aluminum alloys. The LUMIPRIME® solution carries out a chemical reaction with the aluminum substrate and deposits a frosty, gray-colored metallic zinc layer on the surface that serves as a primer for the subsequent black oxide reaction.

**OPERATING CONDITIONS**

Bath Makeup	Mix in tap water at 20% by volume.
Operating Temperature	Room Temperature
Immersion Time	2-8 minutes, as required
Equipment Construction	Tank: Plastic or acid-proof
Ventilation	Not needed. No fumes
Agitation	Desirable for densely loaded racks Use CPVC or acid-proof pump

**BLACKENING PROCEDURES**

The LUMICLAD process utilizes the following sequence:

1. **CLEAN/MICROETCH** in SAFE SCRUB® ETCH cleaner, 70-130° F, 5-10 minutes.
2. **RINSE** in clean, flowing water tank for 30 seconds.
3. **APPLY PRIMER** LUMIPRIME® Primer/Prep solution; 70° F; 2-8 minutes.
4. **RINSE** in clean, flowing rinse tank for 30 seconds.
5. **BLACKEN** in LUMICLAD® solution at 190-200° F; 10 minutes.
6. **RINSE** in clean, flowing water tank for 30 seconds.
7. **SEAL** with a clear topcoat appropriate to the end-use of the article:
  - i. For a clear hard finish, use SATIN SHIELD® SS10 aqueous acrylic wax sealant.
  - ii. For a slight oil finish, use DRI TOUCH® DS Dewatering Sealant.

## **BATH MAINTENANCE**

As the LUMIPRIME® bath operates, its concentration will slowly diminish and its reaction will slow. The solution can be replenished with LUMIPRIME® concentrate to maintain operating concentration. The bath can be titrated for total alkalinity, or tested by means of the GO/NOGO Test Kit, to determine its concentration and the quantity of replenishment needed.

## **PACKAGING & STORAGE**

1, 5 and 55 gallon 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](http://www.birchwoodtechnologies.com)**

**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.

LUMIPRIME® Primer/Prep  
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