# **Oxidite** Advanced Technology for Aluminum Anodizing



- Silicate and Boron-free non-etch Soak Cleaners
- Chromium and Nitric Acid-free Desmutters
- Chromium-free Electropolishing Solutions
- Nickel and Cobalt-free seals



## **Oxidite** Advanced Technology for Aluminum Anodizing

### Pre and Post Treatments For The Anodizing Industry

**MacDermid Enthone** Oxidite Systems demonstrate our expertise in cleaning, etching, desmutting, coloring and sealing for the anodizing industry. Developed and refined to meet customers' exacting needs, they are consistently specified for one reason they work.

Our Oxidite processes are a compilation of our aluminum treatment products assembled specifically to exceed the expectations and requirements of the aluminum finisher. Together they provide all the necessary processes for consistently high quality coating performance.

#### The Most Complete Range Of Anodizing Products



MacDermid Enthone's Oxidite Systems cover all alloys and castings typically treated in the anodizing process. No matter what the need, we have a pre-formulated solution, backed by MacDermid Enthone's global technical service, you can be sure your needs are our goals.

For proven, industry-leading performance and productivity, count on MacDermid Enthone.

### **OXIDITE PORTFOLIO FEATURES**

- Exceptional Process Life and Stability
- Environmentally Compliant Processes
- Complete Anodizing Range of Products
- Reliable, Durable, Consistent High Performance



#### **Decorative Finishes**

Anodic oxidation from sulfuric acid based solutions provides an attractive decorative and protective finish for a wide variety of aluminum articles. Depending upon the initial surface condition and alloy composition, Oxidite products can facilitate a bright, semi-bright or matt effect. The anodic film may be dyed in a wide range of attractive colors.

#### **Architectural Anodizing**

Aluminum is widely used in buildings for window frames, door fittings, balustrades and curtain walling. Architectural anodizing

typically means anodic films of 5 to 25 microns and in certain applications above 25 microns. These thicknesses are required to meet the severe conditions of outdoor exposure combined with infrequent cleaning. The anodic films may be painted to give increased resistance against weathering.

#### Hard Anodizing

Although the normal anodic film produced by the sulfuric acid process is fairly hard and wear resistant, by suitable adjustment of the anodizing conditions harder and thicker films can be produced for engineering applications. The hardness of the anodic film is of the order of 500 H.V. but gives an abrasion resistance typical of a much harder surface. Hard anodizing can be given a honed finish.

#### **Corrosion Resistant Finishes**

High resistance to corrosion is required for automotive, aerospace and military applications. Oxidite processes are extensively used to clean, condition, protect, color and seal all aluminum alloys and castings used in these industries. Oxidite pre-treatment products are also compatible with chromic acid anodizing process sequences.

## **OXIDITE - Process Cycle**



The tables below outlines the recommended products which combined will deliver most advanced anodized surface for all applications.

Product Range	
OXIDITE C-14	Liquid single package, non-silicated, mild alkaline cleaner. Very effective in removing soil, lubricants and buffing compounds, from the surface of aluminum. Effective in hard water and sludge formation is minimized.
OXIDITE E-26	Liquid additive that is used in combination with caustic soda to produce a uniform smooth satin finish (E6 finish). Prevents scale formation. Does not require constant over flow or periodic dumping.
OXIDITE D-34 / D-30	Chromium- free desmutter additive; Nitric Acid-free (D-34).
OXIDITE S-54	Liquid, neutral pH additive for sealing baths in order to prevent the formation of sealing bloom or smut. Used for sealing naturally anodized, dyed or electro-colored work, it accelerates pore closure, and enables sealing to be conducted at 90 - 95°C.
OXIDITE S-69	Nickel based liquid, neutral pH additive for sealing baths in order to prevent the formation of sealing bloom or smut. Used for sealing naturally anodized, dyed or electro-colored work, it accelerates pore closure.
OXIDITE PS/2	Nickel based sealing additive with a minimal amount of dye bleed or smut formation. Typically used to prefix organic coloring, thus avoiding phenomena of "bleed-out "of the colors in the successive and final sealing operations.
OXIDITE Electrobright 2000	Electropolishing; Liquid, Phosphoric acid based chromium-free process.
OXIDITE - Organic Dye	Large sulfate color range of organic dyes available.
OXIDITE TS - Electrocoloring	Tin finishes electrocloloring for stainless steel like from bronze to black.



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