



Aluminum Oxide Remover

Technical Data Sheet

Aluminum Oxide Remover is a fully-biodegradable treatment for removing the Hydrated Oxide layer from the surface of the Aluminum alloys. This new product contains none of the dangerous acids that are common in the Aluminum Fabrication Industry such as: Hydrofluoric Acid, Ammonium Bi Fluoride Acid, Phosphoric Acid

PRODUCT DESCRIPTION :

Aluminum Oxide Remover is a technological breakthrough from Protocol for the Aluminum Fabrication Industry where oxidized aluminum is a major concern. This single step Aluminum Oxide Remover quickly and effectively removes the hydrated oxide from aluminum surface. This hydrated oxide is saturated with hydrogen which makes it one of the primary causes of weld metal porosity in Aluminum Welding.

This product is currently available as a liquid version and is designed to be used as a wipe-on solution for parts or as a flushing product where it is pumped into a vessel or pipe to remove any hydrated aluminum oxides from internal surfaces.

Aluminum Oxide Remover biodegradable, fume-free formulation contains no dangerous acids making it non-impactful to humans and environment. When left on an aluminum part, it will not cause pitting, corrosion or discoloration. The typical result is that the discolored oxide is removed and the aluminum surface is brought back to a clean appearance that is ready for welding after a thorough washing.

Aluminum Oxide Remover virtually replaces the traditional highly dangerous passivation acid & caustic chemicals that are common in the aluminum fabrication industry. Desired results are achieved without damage to substrate, humans or environment. No special use, protective gear, disposal, containment, storage or training is required.

RECOMMENDED APPLICATIONS:

- ◆ Aluminum Ship Building
- ◆ Aluminum Piping
- ◆ Architectural & Specialty Applications
- ◆ Marine Repair Industry
- ◆ Aluminum Gate & Ball Valves
- ◆ Marine Ballast & Water Holding Tanks

FEATURES & BENEFITS:

- ◆ Contains No Dangerous Acids
- ◆ No Toxic Fumes
- ◆ Non-Caustic
- ◆ Environmentally Friendly Passivation Agent
- ◆ Fully Biodegradable
- ◆ Standard Chemical Handling / Storage / Disposal

PRODUCT LIFE EXPECTANCY:

The Aluminum Oxide Remover Chemical shelf life is fifteen (15) months.

COVERAGE:

Approximate coverage is 100 ft² per US gallon

PHYSICAL PROPERTIES:

Color: Clear

pH: Acidic

SG: approx 1.1.5

PREPARATION: & SITE CONDITIONS:

Aluminum Oxide Remover must be used on clean aluminum surfaces that are free of loose debris, oil, grease, paint and paint markers. This product should be applied in temperatures between 50°F and 90°F. This product arrives ready to use and must not be diluted or mixed with any other products. Testing in a small area is recommended to determine exact dwell time.

APPLICATION INSTRUCTIONS:

Aluminum Oxide Remover is designed to be used as a wipe-on product where the parts are coated with the product. The liquid version can't be applied to vertical, horizontal, circular and cylindrical surfaces as it is a low viscosity liquid. Allow time to cool down after welding.

DWELL TIME :

Dwell Time is defined as the time required to achieve the desired results. This calculation can be affected by temperature, surface cleanliness and other housekeeping issues.

- Normal working dwell time (between 50oF to 90oF) is between 5 to 10 minutes.
- Dwell time will vary slightly based on the amount of hydrated oxide on the aluminum parts and fabrications.
- Any surface contaminate like oil, grease, paint or dirt will reduce the efficiency of the product.
- Colder temperatures will decrease working speed and increase dwell times.

REMOVAL:

Aluminum Oxide Remover is fully biodegradable and is environmentally friendly so the product and the waste water are easy to remove and disposed of in accordance with local water regulations.

- It can be removed by washing with a pressure washer.
- Water fully neutralizes this product.
- No special neutralizing chemicals are required.

STORAGE:

Aluminum Oxide Remover requires no special storage or handling. Always check with local regulations to ensure compliance when disposing any material.

HANDLING & DISPOSAL:

Aluminum Oxide Remover requires no special handling. Always check with local regulations to ensure compliance when disposing any material. **HEALTH & SAFETY:**

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Always make sure that employees are using proper (Personnel Protective Equipment). Wear chemical safety glasses with side protection. Avoid skin contact – neoprene gloves and clothing is recommended. Avoid breathing in vapors, mists or sprays – no mask is required if ventilation is available. Refer to MSDS sheet for detailed instructions.

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