

# TETRA-CHEM INDUSTRIES LTD.



**SPECIALTY  
CHEMISTRY**

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**APPLICATION  
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**WASTE MANAGEMENT  
SERVICES**

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**Check out our Web Site !  
www.tetra-chem.com  
www.503info.com**

**PRODUCT IDENTIFIER:  
PROCESS IDENTIFIER:**

## **PRODUCT APPLICATION PRESENTATION**

### **T C I 5 0 3 H . D .<sup>TM</sup>**

#### **NON-ETCHING BRUSHLESS ALUMINUM CLEANER / POLISHING AGENT**

#### **PRODUCT PRESENTATION:**

**TCI 503 H.D.** is a ready to use complex liquid formulation of environmentally friendly dilute acids with unique biodegradable surface active agents. It is designed for safe cleaning, retention and restoration of high optical reflectivity on polished aluminum, hard chrome and stainless steel surfaces. Surfaces previously dulled by etching must be cleaned with **TCI 503 H.D.** first, then buffed to regain and maintain high optical reflectivity.

#### **APPLICATION PROCEDURE:**

##### **THIS PROCEDURE IS FOR TRAINED PERSONNEL ONLY**

To start operation, set up the "CHEMICAL APPLICATOR SYSTEM" and regulate the air pressure to 340-400 kPa (50-60 psi). The pump will operate automatically by starting and stopping the flow on demand at the wand.

##### **HOT WEATHER PRECAUTION ONLY:**

Do not spray **TCI 503 H.D.** directly onto a hot metal surface since it will alter the surface chemistry resulting in staining. Walk around the whole unit being treated and thoroughly cool and wet the entire surface on a hot sunny day. The best cleaning time is early in the morning, evenings and cloudy days. Spray the chemical solution directly from the drum onto the metal surface and have the **PRESSURE WASHER** ready for rinsing. Apply the chemical solution as a spray to a 1-2 metre (3'-6") section of the units body starting from the bottom and working up. Assure complete thin film coverage. Once the application is complete, allow approximately a 1-3 min chemical exposure time. Exposure time is directly proportional to soil thickness. Brushing is optional but not required.

Rinse the section with high pressure water starting at the bottom and consistently moving with a 10 cm (4") fan or less in a horizontal pattern until the top is reached. Then rinse all residual chemical solution thoroughly from the surface working from the top down. Be sure to always rinse the chemical solution overspray from other sections in the same fashion. Special cautions apply to the bulk carriers because of their rounded tops. When the entire unit is complete, a final water rinse and flush will assure no residual chemical activity on the aluminum surface.

#### **WASTE DISPOSAL:**

The cleaning procedure may generate a hazardous industrial waste depending on the surface soil cleaned off. Comply with EPA's Federal, Provincial, State and local regulations.

#### **PROCESS INTRODUCTION:**

**TCI 503 H.D.** formula is designed to effectively remove residual dirt, oils, road film, black welding and diesel soot, corrosion, oxide film, design marker and microscopic projections from polished rolled and extruded aluminum surfaces without "WHITE" etching or pitting. Depending on climatic conditions, this process can be repeated as required. To prevent irreversible damage by harsh cleaning products, we recommend the **TCI 710 H.D. BRUSHLESS VEHICLE WASH** for regular daily or weekly maintenance.

#### **PRECAUTIONARY NOTE:**

Insufficient or negligent rinsing may result in streaks as the surface dries. (ie. trapped chemical) This precaution only applies to rolled aluminum and not to extrusions or sheeting on newly fabricated units. Since brushing is not required, be consistent with spray pattern. For extra pride, chamois surface dry. **This chemical treatment procedure pacifies aluminum metal surfaces and inhibits against corrosion. As the new aluminum surface is now exposed to the air it will form a natural aluminum oxide film protecting it against pit corrosion. Accessories on finished products, such as light assemblies, reflectors, glass & mirrors, plastics, brass, stainless steel, hard chrome, decals, logos, wood, tarps, mud flaps or rubber tires are not altered or defaced by this chemical solution when used according to directions.**

**PACKAGING: 04, 25, 205, 1,025 LITRES**

#### **PROCESS SPECIFICITY:**

The cleaning ability of this product is restricted to quality rolled or extruded primary aluminum articles. **TCI 503 H.D.** is applied as a light mist to the surface to be cleaned using the MANUFACTURER'S approved CHEMICAL APPLICATOR SYSTEM (See equipment) and rinsed with a **HIGH PRESSURE COLD WATER WASHER** operating at > 20 000 kPa @ 15 L / min (2800 psi @ 4 gal / min) this product is ideal for cleaning manufactured products eg. HORSE TRAILERS, RECYCLING TRUCKS, FEED CARRIERS, SEMI DUMPS, BULK CARRIERS (MILK, FLOUR, CEMENT, PETROLEUM etc.), CATTLE POTS, CARGO VANS, TRACTOR WHEELS and FUEL TANKS at the manufacturer and maintenance level of the owner or fleet operators facility.



**Manufacturing Level**



**After Market Level**

**NOTICE:** The cleaning procedure generates less than 1 ppm of phosphates in its sole use as **TCI 503 H.D.** on aluminum. This is in compliance with waste water sewer discharge. Studies on waste wash water being discharged on the ground showed that based on Spectrum Analytic Inc., 1087 Jamison Rd., Washington Court House, OH 43160 Tel: (800) 321-1562 published article on Cation Exchange Capacity, that phosphates are unique among the negatively charged ions, in that they are not mobile in the soil. This is because they are highly reactive, and nearly all of them will combine with other elements or compounds in the soil, other than clay and organic matter. The resulting compounds are not soluble, thus they precipitate out of soil solution. In this state, they are unavailable to plants, and form the phosphorus "reserve" in the soil.

**CAUTION: DO NOT LET ANY CHEMICAL DRY ON THE SURFACE (WIND DRIFT CHEMICAL SPRAY IS A POTENTIAL DANGER)  
ie. CONCENTRATED CHEMICAL WITHOUT WATER MAY STAIN SURFACES IF NOT RINSED**

**PLEASE CALL OUR TECHNICAL SUPPORT LINE @ 1-888-658-5515 FOR SOLUTIONS TO YOUR INDUSTRY.  
CONSULT SERVICE REPRESENTATIVE FOR SAFE AND EFFICIENT APPLICATION**

**THE INFORMATION GIVEN HEREIN IS GIVEN IN GOOD FAITH BUT NO WARRANTY, EXPRESSED OR IMPLIED IS MADE**

Additional severe weather protection available by using **TCI 4603 H.D. Aluma-Guard.**