

## **CLEANING AND MAINTENANCE OF RELIABLE SHEET METAL PRODUCT FINISH**

The molecules on the surface of the coating are so tightly bound together that they don't want to react with anything. Their slick surface helps make them resistant to many elements found in the environment such as air pollution, acid rain, and general air born dirt.

However if the need to clean or remove deposits from your coating does arise, a variety of methods for removal of surface deposits are available. Two precautions: 1) do not use wire brushes, abrasives, or similar cleaning tools which will mechanically abrade the coatings surface, and 2) certain cleaning agents listed below should be test in an inconspicuous area before use on a large scale.

### **CLEANING KYNAR 500 COATED SURFACES**

Although factory-applied finishes are extremely durable, a periodic cleaning to remove build-ups of resins and other residue is a good idea to extend coating life.

Simple washing with plain water using hoses or pressure spray equipment is usually adequate. When heavy deposits of dirt or other contaminants dull surfaces, a heavy-duty dry powdered laundry detergent (such as Tide®) may be used. Mix 1/3 cup detergent with one gallon of water. A long-handled soft bristle brush will make cleaning easier. Follow cleaning operation with a clear water rinse.

In areas subject to high humidity levels, mildew can occur. Most fluorocarbon finishes are inherently mildew-resistant, but dirt and grime deposits can permit mildew growth to occur. The following solution is recommended to remove mildew when necessary:

- 1/3 cup dry powdered laundry detergent (such as Tide®)
- 1 square of sodium hypochlorite 5% solution (such as Clorox®)
- 1 gallon of water

### **HOT OR COLD DETERGENT SOLUTIONS**

A 5% solution in water of commonly used commercial and industrial detergents will not have any deleterious effect on a fluoropolymer surface. These solutions should be followed by an adequate rinse of water. Use cloth or soft bristle brush for application.

### **SOLVENTS**

*Most organic solvents are flammable and/or toxic and must be handled accordingly.* Keep away from open flames, sparks and electrical motors. Use adequate ventilation, protective clothing and goggles.

Solvent that may be used to remove non-water soluble deposits (tar, grease, oil, paint, graffiti, etc.) from fluoropolymer surfaces include:

A. Alcohols

- Denatured alcohol (ethanol)
- Isopropyl (rubbing alcohol)
- Methanol (wood alcohol)

*NOTE: Methanol is toxic. The above alcohols have no permanent effect on fluoropolymer surfaces*

B. Petroleum Solvents and Turpentine

- VM&P naphtha
- Mineral spirits
- Kerosene
- Turpentine (wood or gum spirits)

*NOTE: The above alcohols have no permanent effect on fluoropolymer surfaces*

C. Aromatic and Chlorinated

- Xylor (Xylene)
- Toluol (Toluene)
- Perchlorethylene (Perclene)
- Trichlorethylene (Triclene)

*NOTE: Perchlorethylene and Trichlorethylene are toxic. The above solvents should be used with caution on fluoropolymer surface. Limit contact of the fluoropolymer surface with solvent to five minutes maximum and test before using*

D. Ketones, Esters, Lacquer Thinner, Paint Remover

- Methyl ethyl ketone (MEK)
- Methyl isobutyl ketone (MIBK)
- Ethyl acetate (nail polish remover)
- Butyl acetate
- Lacquer thinner
- Paint remover (non-flammable)
- Acetone (do not use acetone on fluoropolymer surfaces)

*NOTE: The above solvents should be used cautiously on a fluoropolymer surface. Limit contact of fluoropolymer surface and test before using. NOTE: There are many formulation of paint remover on the market. It is possible that some may remove the fluoropolymer surface. Proceed very cautiously in use of paint remover. Metal supplier and coating manufacturer are not responsible for damage from unrestricted use.*

E. CHEMICAL SOLUTIONS

- Sodium hypochlorite solution (laundry bleach, Clorox®)
- Hydrochloric acid (muriatic acid)
- Oxalic acid
- Acetic acid (vinegar)

Hydrochloric or muriatic acid, diluted with ten volumes of water, may assist in removing rust stains from fluoropolymer surfaces. Limit contact to five minutes.

Caution: acid solutions are corrosive and toxic. Flush all surfaces with copious amounts of water after use.

Oxalic acid solutions or vinegar may be used for the same purpose. Flush with water.

### **GRAFFITI**

Graffiti presents a special problem because of the many possible agents used (generally aerosol paint). It is best to try the less active solvents first (Solvent Group A, B, C) then the stronger solvents (Solvent Group D). If none of these are satisfactory it may be necessary to resort to touchup, repaint, or replacement depending on the extent to the damage.

### **TOUCH-UP REPAIR OF SCRATCHES**

Edges of deep scratches should be lightly sanded or feathered with #400 grit sandpaper. Take care not to remove the galvanizing. Scratches and adjacent areas should be wiped with mineral spirits using a dampened lint-free cloth. Allow area to dry thoroughly before applying touch-up coatings. Mix touch-up paint thoroughly to ensure proper color and gloss match. Apply touch-up finish to damaged areas only. Use a good quality artist's brush to blend touch-up paint with factory finish surrounding scratched area. Drying time will depend on temperature, humidity, and should be checked after application.

Spray application for air-dry touch-up is not recommended for repair of scratches and minor damage.

### **WARRANTY**

Misuse or abuse of any of the cleaning agents listed above will result in a voiding of warranty for the surface affected.