



## Makrolon® Cleaning Instructions

Periodic cleaning of Makrolon polycarbonate sheet, using correct procedures, with compatible household cleaners, is recommended to prolong service life of the material.

Makrolon GP polycarbonate has a relatively soft surface that mars easily with wiping action. Makrolon 15, Makrolon AR, and Hygard sheets are hard coated, abrasion/mar resistant polycarbonate products that offer a higher degree of scratch resistance and surface hardness. These products provide superior protection against unintentional chemical attack. However, the use of abrasive, gritty cleaners and/or hard cleaning implements (e.g. hard brushes, scrapers, squeegees) should be avoided to eliminate the possibility of scratching the surface coating.

The following cleaning techniques are based on standard industry practices.

### General Cleaning:

- 1) Thoroughly pre-rinse with warm water to loosen and wash away surface material, grit and grime.
- 2) Using a soft microfiber cloth or moist non-abrasive sponge, gently wash with a mild diluted soap or detergent.
- 3) Rinse thoroughly with lukewarm clean water. To prevent water spots, thoroughly dry the product with a dry soft cloth.

### Removing Heavy Oils and Tars:

- 1) Thoroughly pre-rinse with warm water to loosen and wash away surface material, grit and grime.
- 2) With a 50/50 isopropyl alcohol-water mixture, gently rub the area with a soft non-abrasive cloth.
- 3) Immediately rinse thoroughly with lukewarm clean water. To prevent water spots, thoroughly dry the glazing with a dry soft cloth.

### Removing Graffiti, Paint, Marker, Inks and Glazing Compounds:

- 1) Thoroughly pre-rinse with warm water to loosen and wash away surface material, grit and grime.
- 2) Using Naphtha VM&P grade, Isopropyl Alcohol or Butyl Cellosolve, gently rub the area with a soft non-abrasive cloth. Do not apply solvent cleaners under direct sunlight or during high temperatures.
- 3) Immediately rinse thoroughly with lukewarm clean water. To prevent water spots, thoroughly dry the glazing with a dry soft cloth.



### Removing Adhesive backed Labels:

- 1) Isopropyl Alcohol, Naphtha VM&P grade or Kerosene will help lift stickers and adhesives.
- 2) Immediately rinse thoroughly with lukewarm clean water. To prevent water spots, thoroughly dry the glazing with a dry soft cloth.

### Compatible Cleaners

The following cleaning agents are compatible with Makrolon polycarbonate sheet products when used according to the manufacturer's recommendations:

- Formula 409®
- Top Job, Joy®
- Palmolive Liquid®
- Windex® Ammonia free

[Formula 409 is a registered trademark of Clorox Company, Top Job and Joy are registered trademarks of Proctor & Gamble, Palmolive is a registered trademark of Colgate Palmolive, Windex is a registered trademark of Drackett Products Company]

### Points to Remember

Do not use abrasive cleaners.

Do not use high alkaline cleaners (high pH or ammoniated).

Do not leave cleaners sitting on polycarbonate ; wash off immediately.

Do not apply cleaners under direct sunlight or at elevated temperatures.

Do not clean polycarbonate with unapproved cleaners. When in doubt, seek guidance.

To avoid scratching do not use scrapers, squeegees, razors or other sharp instruments these may permanently scratch .

Always avoid dry rubbing/cleaning your polycarbonate, as sand and dust particles clinging to the exterior of the glazing may scratch its surface.

An Anti-Static Canned-Air Ionizer can reduce electrostatic charge buildup on polycarbonate, consequently reducing dirt and dust buildup that would hinder cleaning.

### Special Note:

The edges of your polycarbonate sheet are not protected with an abrasion and chemical resistance hard coating. Do not allow cleaning solutions and solvents to pool along the edges at any time. . Always rinse edges thoroughly with generous amounts of clean lukewarm water.

### ***Removing scratches from Makrolon polycarbonate sheet/window***

Deep scratches and gouges made by sharp objects such as keys, screwdrivers, and knives cannot be repaired. Fine scratches may be reduced in severity or cosmetically hidden by using a buffing compound such as NOVUS 2 Plastic Fine Scratch Remover, followed by a cleaning and polishing agent like NOVUS 1. However, for abrasion resistant coated products such as Makrolon AR, Makrolon 15 and Makrolon FC,



buffing their abrasion resistant coated surface is not recommended, doing so further damages the coating and these scratched sites worsen the condition. Once removed, the coating cannot be repaired and buffing may optically distort the window.