Performix BRAND

**TECHNICAL DATA SHEET #26**

# PDC® F-830 MURACULON

## PDC® F-872 MURACULON [low voc]

*VINYL SOLVENT BASE - FOR INDUSTRIAL USE ONLY*

**DESCRIPTION:**

F-830 Muraculon is a vinyl based coating used to seal unskinned polyurethane foams. F-830 can also be used on molded polyurethane and closed cell foam containing vinyl.

F-830 Muraculon will produce a skin/membrane on unskinned polyurethane foam to create a barrier to moisture and chemicals. This skin has excellent resistance to fluids and petroleums. F-830 is a tough coating that adds durability to foam and imparts abrasion as well as puncture resistance.

These qualities find particular use in the medical industry, where cushioning and positioning devices are fabricated and used in sterile environments, as well as therapeutic practices. Other uses include cushioning for athletic devices, seat cushions, packaging and acoustical panels. F-830 is an excellent, cost effective replacement for Hypalon® coating.

**OTHER FEATURES INCLUDE:**

Wide selection of colors.
Single component - no catalyst.
Passes UL94 HBF
Fast dry time.
F-830 VOC content average 3.2 #/gal [see msds]
F-872 VOC content average1.4 #/gal [see msds]

**Does not cause artifacts in imaging applications**

**SPECIFICATIONS:** Same for both products

Solids: (wt) 26%
Temperature use range: -0°F to 200°F
Block resistant: 4hr @ 140°F
Coverage: 80 sq. ft. per gallon at 5 mils [dft]
Finish: matte-satin
Shelf life: 1+ year @ 77 f unopened container

Tensile: [ASTM D-412] 713psi
Elongation: [ASTM D-412] 364%
Tear Strength:[ASTM D-1004] .125

Chemical resistance: In House Test Results (ASTM D1308) same for both products

| | | | |
|---|---|---|---|
| Mineral oil: | very good | Machine Oil: | very good |
| Saline: | very good | Blood: | very good |
| Urea (6% in H2O): | very good | All purpose cleaner: | very good |
| Betadiene (Iodine): | *very good | Acid (10% sulfuric in H2O): | very good |
| Gasoline: | good | Alcohol: | very good |

*stained after 5 minutes.

**ALTERNATIVE PRODUCTS:**

F-874, F-888, refer to technical data sheets for more information.

## SURFACE PREPARATIONS:
All surfaces to be coated must be free of any oils, dust or loose foam particles.

## USE ADEQUATE VENTILATION.

## MIXING INSTRUCTIONS:
## QUALITY CONTROL RECOMMENDATIONS FOR SPRAY AND DIP APPLICATIONS.
Like most liquid vinyls, F-830 may coagulate during storage, requiring thorough remixing agitation before use each day. For best results, a *high speed air/explosion proof electric drum mixer along with a Cowles® or other dispersion blade gives the maximum combination of high shear, excellent flow and circulation. Diameters of 3" for mixing five gallon containers and 7" for mixing 50 gallon drums. Note: It has been found that the dispersion blades are highly effective, fast and produce more shearing action than can be obtained from a standard mixing blade or paddle.
After the F-830 has been agitated thoroughly, it should last 8 to 10 hours depending on your dip tank/spray equipment and temperature.
**Avoid making solvent additions before mixing. Check viscosity.** Some adjustments may be necessary for your particular use. Contact technical service for specific applications.

**Prime coat:** Set pot pressure at 20-25psi and atomizing at 30-50psi, open pattern adjustment for a 2"- 4" pattern at 6"-10" from surface. Aim spray gun at foam and fully trigger spray gun. Open material adjustment until a uniform, wet splatter appears on the foam. The wet splatter should melt or flow into the surface of the foam. Coat all sides (except bottom) with an overlapping motion. Make sure all corners and edges are thoroughly primed. The prime coat should be wet to the touch but should not completely color or cover the foam. Its purpose is to wet or prime the surface for the sealing coat, a necessity for proper adhesion.

**Seal coat:** After the prime coat has been applied, immediately begin sealing the foam by only partially pulling the trigger back from its previous setting until a dry, web coating appears. This seal coat should appear lighter in color than the prime coat. Hold gun approximately 6"-10" from surface and use an overlapping motion, being sure to **completely** seal the surface. If seal coat is applied too dry, poor adhesion will result. If applied too wet, sealing surface may become difficult. Again, seal all sides (except bottom), being sure to **check entire surface for complete seal.**

**Finish coat:** After seal coat has been applied, immediately begin applying the finish coat by fully triggering spray gun as in prime coat. Holding the gun 6"-10" from surface, apply a uniform splatter coat using an overlapping motion. Apply the finish coat as desired in thickness and texture. The finish coat is necessary to increase seal coat strength and durability. Allow the finished coated part to dry to the touch (see caution), minimum 5 minutes, then return to prime coat, seal coat, and finish coat bottom of part. Follow instructions and be sure to pay close attention to corners and edges on all steps.

**NOTE:** To accelerate final drying, place coated object in ventilated oven at 100°F-140°F for 5 minutes. Make sure heat source is safe for this use and that you ventilate properly. To increase coating speed, you may increase atomizing pressure; open material adjustment and pattern adjustment to your comfort level.

**CAUTION:** It is important to apply all coatings at once. Do not allow to set more than 10-20 minutes or subject to heat.
*** Contact Plasti Dip International Technical Service for specific equipment recommendations.**

## RECOMMENDED EQUIPMENT AND SETTINGS:
Binks® model 2001/ 95 gun
Nozzle: 66SS
Cap: 66SD
Needle: 565
Material: 25psi
Atomization: 30-50psi
Dilution: none required
Clean up: Acetone and Methyl Ethyl Ketone
**HINTS:** Always mix before **spraying**. Avoid excessive air movement, heat or humidity. Always use proper ventilation and protection.

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