

# 5090 SERIES

## SWARCOPLAST THIN FILM MMA



### PRODUCT DESCRIPTION

SWARCOPLAST Thin Film MMA 5090 Series is a solvent-free, 100% solids, sprayable plural-component system designed for highway marking materials with enhanced nighttime visibility.

SWARCOPLAST Thin Film MMA can be applied to Portland Cement Concrete (PCC) and asphalt surfaces as a durable striping material for both edge and centerline markings. It can also be used for roadways, crosswalks, symbols and legends. This system is appropriate for 98:2 mixing equipment. It may also be used as Part A in the 5090/4090 1:1 system (see 4090NR data sheet for more information).

SWARCOPLAST Thin Film MMA may be applied only with specialized application equipment for cold plastic markings (98:2 system).

### TECHNICAL DATA

PROPERTY	5090 WHITE	5096 YELLOW
Color, Federal Standard 595B	37925	33538
Weight per gallon	13.2 - 13.6 lbs.	12.7-13.1 lbs.
Viscosity, KU	90 - 100	90 – 100
% Solids, by wt.	> 99	> 99
Gel time @ 25°C	2 – 10 minutes	2 – 10 minutes
Cure time @ 25°C	5 – 10 minutes	5 – 10 minutes
Hardness (Shore D)	60 minimum	60 minimum
Reflectance	85 minimum	50 minimum

### ADVANTAGES

- 100% solids chemistry
- Superior durability
- High reflective qualities
- Special chemistry for rapid set at a wide range of temperatures
- Outstanding long-term abrasion resistance
- Exceptional adhesion to a variety of substrates
- Protection against moisture penetration
- Excellent ultraviolet light stability
- Snow plow resistant
- Economical durable marking

### MIX RATIO BY WEIGHT

- 98:2 Component A: 5090 White/5096 Yellow Component B: N208 Liquid Hardener

## COVERAGE

- Coverage depends on desired layer thickness, application technique, machine adjustments, and the type and state of the surface.
- When applying at the typical recommended layer thickness of 25 - 35 mils, presume material use of 130 - 200 ft. / gallon at line of 4-inch width.
  - 25 mils » 200 linear feet (4-in line)
  - 30 mils » 165 linear feet (4-in line)
  - 35 mils » 130 linear feet (4-in line)

## PACKAGING

**Component A: 5090 White / 5096 Yellow:** \*other colors available upon request

- 4 gallon pail
- 50 gallon drums

**WARNING! PART A IS FLAMMABLE** – keep away from open flames and sparks.

**Component B:** (For 98:2) A liquid benzoyl peroxide dispersion of 40% active BPO should be used.

(For 1:1) Use non-reactive Part B (4090NR series of matching color) in 1:1 ratio; see instructions on 4090NR Series Data Sheet for incorporation of liquid BPO.

WARNING: B-COMPONENT CONTAINS ORGANIC PEROXIDE

## INSTALLATION & SURFACE PREPARATION

### General Information

It is recommended that all of the instructions provided in this document and/or by SWARCO Colorado Paint Company/Swarco technical representatives be followed exactly. Any variations from the directions may compromise applicability and performance. Only drop-on materials and techniques approved by the manufacturer should be used.

### General Surface Preparation

In general, coating performance is directly proportional to the quality of surface preparation. Before applying coatings, surfaces must be clean and dry. Remove all grease, oil, gasoline, dirt, grass, loose gravel, old, peeling or flaking paint, and other contaminants.

Flux oils of new asphalt are detrimental to the bonding mechanism and may lead to discoloration or delamination. Since mechanical removal of these oils is not possible, the surface should be exposed to traffic for 4 - 8 weeks before Swarcoplast MMA products are applied. New concrete should be allowed to cure for at least 30 days prior to coating. Curing compounds, salts and other foreign materials must be removed prior to application. It is strongly recommended that a sample is applied to a small area to determine whether the surface is ready to accept the durable marking prior to full application. Moisture content of concrete surfaces must not exceed 4% when applying marking.

### Weather Conditions

Surface, air and material temperature should be between 40 - 90 °F, and at least 5°F above the dew point. Relative humidity must be less than 75%. Note: cooler temperatures will prolong cure time and warmer temperatures will shorten cure time.

## ▪ Equipment

Specialized equipment for 98:2 spray application must be used. Only personnel properly trained in application of MMA products should apply this product. A solvent such as acetone should be used to flush out the mixing line and gun each time there is a period of time between use that exceeds pot life (approximately 3 – 5 minutes at room temperature; could be faster at elevated temperatures). Because of the rapid set up time, manual application via roller or squeegee is not recommended.

Cure time/pot life can be affected slightly by adjusting the 98:2 ratio. To lengthen cure time (usually in warmer application conditions), the liquid hardener can be reduced by up to 50% (99:1). To shorten cure time (usually in cooler application conditions), the liquid hardener can be increased by up to 50% (97:3).

## ▪ Cleanup

Thoroughly wash all equipment before activated material sets using acetone or other suitable solvent. Be sure to observe proper safety practices when using acetone or other flammable solvents, including proper ventilation, grounding, PPE, and in areas free from sparks or open flame. Clean any spills immediately. Do not permit spills to contaminate drains or aquatic environment.

## SAFETY

Before working with this product, the user is required to read and understand the information provided in the Safety Data Sheets and to follow the safety precautions and good industrial hygiene practices. Designed for use by trained professional personnel only.

## STORAGE

Store in a dark, dry, and cool place. Protect from freezing. The shelf life when stored appropriately in the original sealed container is two years from the date of manufacture.

## WARRANTY

SWARCO Colorado Paint, LLC warrants to the purchaser that this product shall be manufactured without defects when applied according to SWARCO Colorado Paint Application Instructions. This warranty covers material replacement only. Excluded from coverage is labor, any damage to the application surface or any failure of the coating caused other than by defects within the material. Because the conditions of use are beyond our control, SWARCO Colorado Paint shall not be liable for any injury, loss or damage, direct or consequential, arising from the use or the inability to use the product herein.

All statements, technical information and recommendations contained herein are based on tests we believe to be reliable, but the accuracy and completeness thereof is not guaranteed. Data is subject to alteration due to technical advances.

Above information not to be taken as a warranty or representation for which we assume legal responsibility. It is offered solely for consideration, investigation and verification.

If you have any questions about proper application techniques or other technical support issues, please contact your SWARCO sales or customer service representative.

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