

# 3180 MFUA-10 SERIES

## MODIFIED POLYACRYLATE TWO-COMPONENT PAVEMENT MARKING



### PRODUCT DESCRIPTION

MFUA-10 is a 100% solids, reflectorized multi-functional polyacrylate, TMPTA (trimethylolpropane-triacrylate) free, two-component system designed for rapid-setting highway marking. It provides high durability and abrasion resistance.

MFUA-10 system can be applied to Portland Cement Concrete (PCC) and asphalt surfaces as a long-lasting striping material for both edge and center line markings. MFUA-10 can also be used for roadways, crosswalks, symbols, and legends.

MFUA-10 can be applied using existing two-component epoxy traffic paint application equipment.

MFUA-10 is available in white, yellow and black and can be reflectorized with glass beads.

### TECHNICAL DATA

PROPERTY	TEST METHOD	SPECIFICATIONS
Percent Solids	ASTM D1353	100%
No track time @ 77°F / 25°C, with glass beads	ASTM D711	<5 minutes
Adhesion to concrete	ASTM D4541	100% concrete failure
Hardness (Shore D)	ASTM D2240	>75
Abrasion resistance	ASTM D4060	<60 mg weight loss
Tensile strength	ASTM D638	>6,000 psi
Compressive strength	ASTM D695	>12,000 psi
Yellowness index	ASTM D1925 and ASTM E313	<6
Yellowness index after QUV exposure for 72 h QUV	QUV per ASTM G154 and ASTM E313	<15

Color: Federal Standard 595B

White: 17925 Yellow: 13538

- **Part A:** 3180 MFUA-10 White, 3186 MFUA-10 Yellow, 3187 MFUA-10 Black
- **Part B:** 3185 MFUA-10 Catalyst

### ADVANTAGES

- 100% solids, 2:1 by volume mix ratio
- Low viscosity for smooth application
- Rapid curing for less road coning
- Special chemistry for rapid set at a wide range of temperatures
- Outstanding long-term abrasion and corrosion resistance
- Exceptional adhesion to a variety of substrates
- Protection against moisture penetration
- Good flexibility

- Excellent ultraviolet light stability
- High reflective quantities

## COVERAGE

Coverage in linear feet per gallon

LINE WIDTH	THICKNESS IN MILS		
	15	20	25
4"	320'	240'	192'
6"	214'	160'	128'
8"	160'	120'	96'

## PACKAGING

- 55 gallon drum
- 250 gallon tote

## HIGH SHEAR VISCOSITY CHART (the values are in centipoises (mPa·s))

TEMPERATURE	CATALYST	WHITE	YELLOW
100 °F (38 °C)	1225	959	1111
105 °F (40 °C)	927	744	864
110 °F (43 °C)	745	599	699
115 °F (46 °C)	578	483	566
120 °F (49 °C)	484	396	467
125 °F (52 °C)	423	326	389
130 °F (54 °C)	325	273	328
135 °F (57 °C)	269	228	278
140 °F (60 °C)	223	193	238
145 °F (63 °C)	188	164	206
150 °F (66 °C)	159	141	180

## INSTALLATION & SURFACE PREPARATION

### Placement

All technical data regarding material type, application rate, and the glass beads will be provided by a SWARCO Colorado Paint Company representative to the project engineer prior to starting work. All procedures must be followed exactly per manufacturer's instructions.

## ■ Surface Preparation

To assure maximum adhesion and properties, the surface shall be dry and clean. Tape a 12-inch square sheet of thin plastic to the road surface, being careful to seal all edges. After 15 minutes, examine the bottom of the sheet and the road surface. If more than a sparse amount of moisture is present, do not apply. Surface preparation shall include, but not be limited to, cleaning and removal of sealing and curing compounds. All pavements and temporary paint markings shall be cleaned to be free of grease, oil, dirt, grass, loose gravel, loose or flaking paint, and other materials.

The pavement surface area to be prepared shall be wider than the MFUA-10 line to be applied, such that a prepared area shall be clean on all sides of the MFUA-10 after application. New asphalt, concrete, and seal-coated surfaces shall be in place for a minimum of two weeks prior to application and shall have all of the curing compound removed.

To avoid interference with the MFUA-10 system, any existing marking shall be physically removed by any agency-approved method other than by the use of chemicals. All existing markings shall be at least 90% removed. MFUA-10 may be applied over temporary waterborne paint markings that are very well adhered to the substrate and are thinner than 8 mils (200 µm).

## ■ Final Surface Preparation

Upon completion of the surface preparation, the pavement surface shall first be power broomed and vacuumed. An additional compressed air operation, separate from the compressed air guns on the striping applicator, shall be used to remove residue and debris resulting from the cleaning work. Compressed air shall be used during striping application.

## ■ Weather Conditions

Application shall be done only during dry conditions and when the ambient (air) and surface (road) temperatures are higher than 35°F (2°C) and rising and maximum 90% Relative Humidity. The pavement temperature and ambient temperature and weather conditions shall be determined and documented before the start of the application and at any other time deemed necessary by the manufacturer or the agency.

## ■ Equipment

MFUA-10 shall be applied with equipment utilizing the impingement mix, solvent free, airless spray application system or standard mix tube application equipment. The equipment shall be designed to accurately control flow of the material at the spray tip. The equipment shall have pressure gauges for each proportioning pump. The equipment shall have a metering device to register the accumulated footage for each spray gun or a meter to determine actual volume used.

## ■ Operation

Each vehicle shall be operated by a technician who is an expert in that particular equipment's operation and plural component systems application techniques. The equipment shall be very clean and in sound operating condition. All safety precautions and good industrial safety practices shall be followed.

## 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 the 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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