# **HPS-8 Integrated Multi-Polymer**

High Performance System (HPS)

## **PRODUCT DATA**

Product Type: HPS-8 Integrated Multi-Polymer Extrude
Product Code: 884900 884901 884910
Product Color: White Lead Free Yellow Black

Description: IMP WHT HPS 8 EXTRD

IMP LF YEL HPS 8 EXTRD

Specification: Ennis-Flint HPS-8 Effective Date: March 16, 2023

## **Product Description:**

HPS-8 Integrated Multi-Polymer Extrude is a unique binder system composed of a series of polymers designed for high abrasion and impact resistance similar to traditional high-durable systems such as MMA and epoxy. However, due to the nature of these polymers, HPS-8 is 100% solids and can be applied by standard thermoplastic extrude equipment at thicknesses as low as 50 mils and up to 120 mils. The polymers in HPS-8 also offer superior adhesion. Long-term retroreflectivity is ensured through an intermix of both Type 1 and Type 3 beads. Upon cooling to normal pavement temperature, HPS-8 provides a very durable marking material for low and high volume traffic areas.

## **Product Advantages:**

- Impact and abrasion resistance equal to traditional high durability binder systems
- Ability to be applied with standard thermoplastic extrude equipment.
- Fast set up keeps traffic control to a minimum when striping

#### **Packaging:**

HPS-8 is sold in one ton increments (2000 pounds). The ton is divided into 40 heat- degradable bags each weighing approximately 50 pounds.

#### Storage:

The shelf life of the product is one year from date of manufacture with proper storage. Proper storage includes inside or covered to prevent from moisture, and below 120°F. Outside storage for short intervals is acceptable as long as the material is kept dry.

### **Conditions for Application:**

All surfaces must be clean, dry and free from oil, grease, antifreeze, loose sand, aggregate and chipping/peeling existing striping. Any curing compounds used on new concrete must be mechanically abraded off prior to striping and use of a primer may not be required. Concrete should be allowed to cure 14 days. When in doubt, always test adhesion. While HPS-8 may be installed behind the paver once the material cools, new asphalt should be allowed to cure for a minimum of 14 days to maximize adhesion and durability. HPS-8 must be melted to a temperature of at least 425°F (218°C), mixed well and applied in a molten/liquid state to the pavement. Roadway surface temperature at the time of application should be 50°F (10°C) and rising.

#### Coverage:

One ton yields approximately 6000 feet of 4" stripe @ 90 mils – surface texture will decrease the yield.

## **Physical Characteristics:**

% Binder: 21% minimum
% Glass: 38% minimum
Intermix glass spec: M-247 Types 1 & 3

% TiO<sub>2</sub> in the white: 10% minimum

 595B color, white:
 17886

 595B color, yellow:
 13538

White Reflectance (Y value): 75 minimum
Yellow Reflectance (Y value): 45 minimum
Minimum Impact Resistance 23°C:160 inch Ibs.
Minimum Impact Resistance 0°C:20 inch Ibs.
Yellowness index, white: 0.12 maximum
Taber Abrasion (ASTM D4060): 350 mg loss max

**Dry Time:** With drop on glass beads applied, HPS-8 shall be sufficiently tack-free to carry traffic in not more than 2 minutes when pavement surface temperature is at 50°F, and not more than 10 minutes when pavement surface temperature is 130°F.

**Limitations:** Applying a test strip to determine if surface is dry enough if there has been rain in the last 24 hours.

- Do not apply if hot material shows moisture bubbles.
- Do not heat HPS-8 above 450°F.
- Do not apply when road and ambient temperatures are below 50°F.
- Do not apply when temperatures are near or below the dew point.
- Material at application is hot please wear personal protective equipment as described in MSDS



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