

# Thermoplastic Road Marking Paint

Everything for traffic safety

# PRODUCT DATA

**Product Type:** Based on Hydrocarbon  
**Specification:** Meets AASHTO-M249 standard  
**Available Color:** White/Yellow, Black & Blue & Green (customized color)

### Product Description:

TIANHUA Thermoplastic Road Marking Paint is a 100% solids material blend of binder, pigments, glass beads, performance additives and other wear-resistant fillers. The binder is made from petroleum-derived resins, it is the best used for long-lifespan road marking applications. Intermixed and drop-on glass beads provide retroreflectivity for nighttime visibility of the road marking. Its composition specification and physical technical data conforms to AASHTO-M249 standard.

### Application of film thickness & coverage:

Application requires the skills of trained personnel and specialized equipment. It must be melted to a temperature of at least 200°C (392°F), mixed well and applied in a molten/liquid state to the pavement. General marking thickness is 1.5-3.0mm (recommended thickness 2.0mm). One ton yields approximately 200 ~ 250m<sup>2</sup> according to different application method, thickness and situation of road surface.

### Application of Glass Beads:

It is important that the specified film thickness is achieved in order to maximise glass bead retention and the wearing properties of the marking.

- drop-on glass beads should comply with required standard, applied at the rate of 0.3~0.4kg per sq. meter, require a dry film thickness of 1.8 mm for optimum retroreflectivity. It can be applied at a film build of 1.5~3.0mm.
- To ensure maximum bead adhesion retention, the beads must be applied immediately after spraying on surface of road, then the marking needs to be protected from traffic until it dries.

### Pavement Preparation:

All surfaces must be clean, dry and free from oil, grease, antifreeze, loose sand, aggregate and chipping/peeling existing striping. Otherwise it will affect the adhesion between the coating and the road, thereby reducing the service life of the coating. Pavement surface temperature at the time of application should be 10°C (50°F) at least or keep rising. Any curing compounds used on new concrete pavement must be mechanically removed off prior to applying paint and use of a primer is strongly suggested. New asphalt pavement should be allowed to cure for a minimum of 14 days to maximize adhesion and durability. When in doubt, always test adhesion.

### Transport conditions:

Thermoplastic Road Marking Paint is not classed as dangerous goods by Chinese Testing and Technical center for dangerous goods and packing (DPTC) by Road or Railway or Ocean.

### Expiry & Storage:

The shelf life of the product is one year from date of manufacture with proper storage. Proper storage includes inside shaded, dry and ventilated or covered to prevent from moisture, and below 38°C (100°F). Outside storage for short intervals is acceptable as long as the material is kept dry. Prolonged outdoor storage or high temperature storage may cause material deterioration.

### Packaging:

25kg compound-plastic bag (General bag) or EVA melted bags(Customized bag)

### Additional information:

TIANHUA thermoplastic road marking paint has following features:

Excellent adhesive property, stability and long-term reflective ability. Excellent anti-micro-cracking performance and weather resistance ability.  
 Excellent application performance: Fast dry, good flow property, and has good anti-skid performance.

Please contact with us if you require:

- Pricing and availability
- Or more specific information on this product or other products in the wide range of products manufactured by us.

Composition	AASHTO M249 Spec	
	White	Yellow
Binder Content %	20±2	20±2
Solid glass beads	30-40%	30-40%
Titanium dioxide	10%	/
Calcium carbonate inner filler & yellow pigment %	42 max.	/
Physical Characteristics	AASHTO M249 Spec	
Softening point after heating for 4 hours @ 218°C	102.5±9.5°C	
Specific Gravity	2.15 Max	
Flash Point C.O.C. *	/	
Day light reflectance after 4 hours @218°C and cooled @ 25°C±2°C	75% min-white 45% min-yellow	
Drying time @ air temp 10±2°C@ air temp 32±2°C	2min (Max.)10min (Max.)	
Bond strength	180PSI (min.)	
Cracking Resistance(Low temp)	No crack	
Impact Resistance	10 in/lb (min.)	
Flowability. -% Residue	21% Max.	
Flowability after extended heating	28% Max.	

\* Flash point carried out as a routine test to ensure safe handling and melting during pre-heater and spraying operation



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