



# Colored Two-component Polyurethane Anti-slip Coating for Road

## Product Description

It is environmental two-component polyurethane adhesive material.

Colored and suitable for color anti-skid pavement and colored stone permeable pavement.

After curing, it has high strength, high toughness and strong adhesion.

It can be directly bonded on the surface of asphalt, concrete, iron plate, wood board and other materials with high extensibility, good flame retardancy, strong corrosion resistance, oil stain resistance.

## Key Features

### 1. Good anti-skid performance

It can significantly increase the dry and anti-sliding performance of the road surface in rainy days, and shorten the braking distance by more than 40%

### 2. Various colors are available, bright and lasting

The non-slip aggregate is made of many kinds of color and never-fading colored ceramic particles, which can ensure bright color and durable.

### 3. Thickness 2-5mm

The thickness is thin and the weight is light, which will not increase the bearing burden of bridges and pavement foundations.

### 4. Good waterproof performance

The material makes the pavement surface closed and has good waterproof performance.

### 5. Reduce vehicle noise

Absorb sound waves, reduce noise by 6-7 decibels, and reduce noise by about 30%

### 6. Good weather resistance

Low temperature brittleness is low, which is beneficial to use in severe cold areas. Excellent thermal aging performance and high temperature stability. Wide bonding range, suitable for a variety of materials

### 7. Effectively extend the service life of roads

Strong rutting resistance, reducing or preventing road surface cracking, and improving service life

## Typical Applications

Road intersections, ramps, bends, mountain roads, narrow roads, deceleration areas, greenways, sidewalks, bicycle lanes, bus lanes, parks, squares, scenic spots, etc.

## Technical Data Table



ITEM		VALUE	
Component		Part A	Part B
Color		Red/green/blue/etc	Dark brown liquid
Mixture ratio (PP5116)		A:B = 5:1	
Mixture ratio(PP4116-1)		A:B = 4:1	
Mixture ratio(PP5116-2)		A:B = 5:1	
Mixture ratio(PP5117-2)		A:B = 5:1	
Viscosity(PP5116)		5100±500	200±50
Viscosity(PP5116-1)		5100±500	200±50
Viscosity(PP5116-2)		25000±500	5100±500
Viscosity(PP5117-2)		13000±500	200±50
ITEMS	Unit	Performace after Curing	
Solid content	%	>99	
Operating time after mixing	min	>30	
Tack free time	H	<1	
Full drying time	H	24	
Bonding strength with concrete	MPa	≥3	
Non-slip-dry-wet friction coefficient	/	>0.7	
Temperature resistance	°C	80 No change (cracking, peeling, peeling)	
Frost resistance	°C	-30 No change (cracking, peeling, peeling)	
Acid resistance	/	No change after soaking for 15 days in 1% H2SO4 solution	
Alkali resistance	/	Saturated Ca(OH)2 solution soaking for 15 days without	
Shelf life	Month	9	

Note: All data above were tested under special condition (7 days after full cured).



## Directions for Use

### 1. Clean the road

Firstly, use reflective cone or other warning guardrail to enclose the road surface to be laid, and then use broom or road cleaning machine to clean up the sundries and other rubbish on the ground, then use a hair dryer to clean up the dust on the ground.

Note: no water or moisture is allowed on the construction road surface. Wet road surface will greatly reduce the adhesive force of colored road surface adhesive to the road surface, seriously affecting the adhesive quality.



### 2. Paste the paper

Use masking paper to paste the design figure on the road surface according to the requirements of the construction design drawing

Note: The tattoo paper must be attached to the outside of the graph, not the inside of the graph, and must be attached to the ground at the same time.

### 3. Mixing color pavement adhesive

Open the colored non-slip pavement materials material A and material B, first use the stirrer to stir material A, the stirring time is generally 60 seconds, then pour material B into material A, use a stirrer to stir, the stirring time is generally 90 seconds (depending on the weather conditions).

Note: Be sure to stir material A and material B evenly and the stirring time should not be too short or too long. After a long period of time, the adhesive of the colored pavement will solidify too fast and should not be spread out, which will cause the adhesive of the colored pavement to be scrapped or affect the quality.



#### 4. Spread colored pavement adhesive

Gradually pour the colored pavement adhesive onto the ground to be constructed, and spread it with long wool roller.

Note: it is necessary to ensure that the construction drawings are evenly spread with colored pavement adhesive, and the colored pavement adhesive will be flattened naturally. The construction personnel should carefully check which places are not evenly spread with colored pavement adhesive, try to ensure that the thickness of Color pavement adhesive is consistent.



#### 5. Throwing ceramic particles

Color pavement adhesive evenly spread and scatter ceramic particles at the same time

Note: ceramic particles should be evenly scattered, subject to completely covered colored pavement adhesive. Because all kinds of pavement conditions are different, it is necessary to repeatedly check whether there are partial colored pavement adhesives that are not covered by ceramic particles after the ceramic particle scattering is completed. If so, it is necessary to scatter ceramic particles again, to achieve full coverage. It is especially important to note that the time of Color pavement adhesive from mixing, spreading to ceramic particle scattering should be controlled within 15 minutes as far as possible, otherwise the quality will be affected.

#### 6. Uncover the tattoo paper

After the ceramic particles are scattered, the masking paper must be uncovered within 15 minutes.

Note: When the construction area is not large, the masking paper should be uncovered immediately after the ceramic particles are scattered. If the time of uncovering the textured paper is delayed, the



colored road surface adhesive left on the textured paper will solidify together with the materials in the figure, which will be difficult to completely remove and affect the beauty.



### 7. Recycle ceramic particles

After about two hours of ceramic particle scattering, observe the solidification of colored pavement adhesive. (In general, the color pavement adhesive can achieve 90% solidification in 90 to 120 minutes, and ceramic particles can be recycled.)

Note: do not recycle ceramic particles mixed with garbage and sundries.

8. After 4-6 hours of construction, it will be opened to traffic, and the construction of colored anti-skid pavement will be completed. Construction is strictly prohibited under the condition of wet base surface or high atmospheric humidity

### Packing and Storage

Packing: Part A: 20kg/Bucket Part B: 4kg /Bucket

Transportation:

1. Sealed and stored in a dry, cool, and well-ventilated place away from sunlight.
2. It is suggested to be stored at 5~25 °C, and the humidity is less than 50%RH.
3. If the temperature is higher than 40 °C or the humidity is more than 80%RH, the shelf life may be shorter.