

Aqua Liner High Solid®

Acrylic waterborne road marking paint

Product certification procedure in progress

Description:

The acrylic waterborne road marking paint, AQUA LINER, is a suspension of pigments, and mineral fillers in acrylic resin solution, in organic solvents, with additives.

Application range:

AQUA LINER is designed for mechanical application of horizontal road marking of roadways, squares, parking lots and other road and traffic bituminous or concrete pavements.

The paint is designed to be used with the glass micro beads.

Application methods:

AQUA LINER should be applied only mechanically by any type of road marking machines (pneumatic and hydrodynamic road marking machines). All the elements of the road marking machine that stay in contact with the paint should be made of stainless steel. Due to the risk of clogging the spray nozzles with the drying paint during breaks in the application, the pneumatic spray application is not recommended at the air temperature above 25°C.

Functional parameters:

The acrylic waterborne road marking paint, Aqua Liner, shows high solid contents, density and very good hiding power. The paint forms coatings with good adhesion to the substrate, free from cracking, with high abrasion resistance and weather exposure resistance, as well as high durability of the reflective effect.

The use of retro-reflexive glass micro beads provides excellent visibility at night in the car headlights. Thanks to the very good adhesion of the micro beads to the paint, the reflective effect of the coating shows very high durability in operation.

Basic technical specification:

Density at 20 °C	[g/cm ³]	1,60-1,70
Viscosity at 20 °C (flow cup Ø 6mm acc. to PN-C-81701:1997)	[s]	22-28
Solid contents	[%weight]	76-79
Colour		white, yellow

Curing time:

In favourable conditions the curing time of 15 minutes can be achieved to be able to continue the car traffic (tests pursuant to ASTM D711-89). The curing time is longer with the lower air and substrate temperature and with the higher layer thickness.

The curing time is influenced as well by other factors, such as: type of substrate, humidity, and wind power.

Due to the above, it is recommended to check the dryness level of the coated road section prior to opening it for road traffic.

Coverage:

On good quality pavements the correct marking parameters may be obtained with the paint yield at 600 g per m². In the most common conditions the recommended paint yield should be at 600g – 800g per m². The maximum paint consumption in one layer is 1kg per m².

Application instructions:

AQUA LINER should be applied on clean, dry and cohesive bituminous or concrete paving. In order to obtain homogeneity of paint in the original packaging, it should be carefully stirred before use.

Aqua Liner paint is supplied at the viscosity ready for application. Only in the case of significant increase of paint viscosity, e.g. due to the low ambient temperature (10 °C), thinning by means of a small quantity of tap water is allowed, in 2% by weight.

Before application solventborne paint or organic solvent should be removed from the road marking machine. The machine should be cleaned mechanically and rinsed with the thinner WPZ 11 for road marking paints, symbol: 24.30.22-79.31-1318151-WPZ-Z011, and then with tap water. During any breaks in paint application the spray gun should be placed in a pot with water. Directly after finishing the application work, the machine should be rinsed with water and then with the thinner WPZ 11.

The paint should be applied at the air temperature range of 10-35°C, and the relative air humidity not exceeding 80%. The curing time depends not only on the air temperature, but is also significantly determined by the relative humidity and the air circulation.

In order to obtain the reflective effect of the coating, glass micro beads should be applied on the paint within 3 seconds from the paint application. Micro beads should be applied mechanically, to provide adequate immersion in the paint. Manual glass bead application is not acceptable. The yield of glass beads should range from 250 to 300 g/m².

Recommended types of glass micro beads: 125-600 3FBTC=3FBA14 or 125-630 MB.1.B2.T(P) produced by Sovitec or equivalents from other suppliers, e.g. 125-630 MB9B2T produced by Interminglass.

Thinner:

Tap water.

Packaging:

30 kg plastic bucket.

Guarantee period:

In original packaging, at temperature above 5 °C, not exposed to direct sunlight, the product may be stored for 12 months from the production date.

H&S and fire safety considerations:

AQUA LINER is not flammable material, it is not hazardous for the user or the environment. It is free from aromatic hydrocarbons. However, it is forbidden in particular to smoke or eat during the application.

Detailed information has been included in the Material Safety Data Sheet