

NAVIPLAST

Thick-coat roadmarking thermoplastic material

PKWiU Symbol:

1317143-P3Z-0270

Standard:

ZN-PCW-1419:2004

Approvals:

PZH - HK/B/2479/01/2002, IBDiM Technical Approval No. AT/2004-04-1664

Properties:

Naviplast thermoplastic material is sold as a powder composed of pigments, fillers, resin granules and additives. It also contains reflective glass micro beads.

It is applied in a liquid form obtained by melting the material in a given temperature which ensures that it adheres well to the substrate.

Range of application:

Markings made using the thermoplastic material are especially recommended in areas with heavy traffic e.g. as stop and yield lines, turn and guiding arrows, lane and edge lines as well as zebra crossings.

Application methods:

The melted material can be spread: Manually using the screed method or mechanically employing a self-propelled application machine applying the material through extrusion, pouring or spray, a special application machine for structural markings can also be used.

Consumption:

5-7 kg/m² for a flat line road marking.

Functional properties:

Markings made using Naviplast adhere well to the substrate, have a high resistance to abrasion and conditions of atmospheric exposure and the glass beads contained within ensure that reflectivity is maintained throughout the service life of the marking.

General technical information:

BarwaColour		white, red
Softening temperature	[°C]	80-105
Material temperature during application	[°C]	185 - 205
Time before traffic can be resumed in 20°C	[min]	3-5
Spreading of material after melting	[cm]	7,5-9,0
Form the material is sold in		granulate

Application:

Apply onto a clean dry bituminous or concrete substrate free of oil and dust, at a temperature of both the air and substrate over 5 °C, and at a relative humidity not exceeding 80 %.

If markings are applied at an ambient temperature below 5°C, the substrate has to be heated.

In case the marking is applied on used mixed mineral bituminous or concrete substrates, it first has to be primed using Naviplast Primer applied by spray or using a roller or brush.

Before application the product is first melted in a boiler equipped with a mixer at a temperature of 185-205°C.

Due to the danger of locally overheating the material, it is recommended that a boiler with oil jackets be used equipped with a temperature regulation system. During the heating process the material cannot be exposed to temperatures exceeding 210 ° C. Once a uniform fluid-like mixture is obtained the material can be applied.

Naviplast is applied in a 3 mm thick layer onto marked surfaces in the form of flat lines which produces a consumption of 6 kg/m².

On request we can prepare the Naviplast Profil version for rumble strip application or Naviplast Struktura, then the thickness and shape of the layers and consumption will depend on the application method and device parameters. When applying Naviplast Spray using a self-propelled application machine, the thickness of the applied layer should come to 1,5mm.

Reflectivity is obtained by mechanically applying glass beads at a granulation of 100-600 µm , 125-850 or 400-840 at an amount of 250 to 350g/m², in a way ensuring their proper immersion in the material.

Special attention has to be paid to ensure that the correct temperature of the melted material is maintained when applying the markings. Any significant deviations from the above rules impact the colour, durability and reflectivity of the applied marking.

Packaging:

Polyethylene bags – 20 kg each.

Warranty:

12 months from the production date if stored in its original packaging and not exposed to direct sunlight.

H&S and fire safety guidelines:

Store the product in its original packaging in a dry, cool and well-ventilated room at a temperature of 0-30°C. Protect from direct sunlight and other sources of heat and fire.