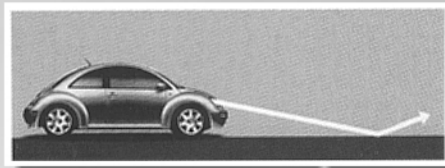


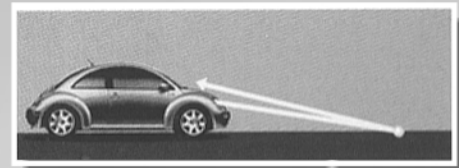
LIGHT-REFLECTING GLASS-BEADS

GENERAL CHARACTERISTIC

The good visibility on the road and highway designations in all atmosphere conditions turns to be indispensable to the performance of the important functions of the warning signs - to ensure the safety of all participants in the road traffic. During the day the sufficient visibility of signs could be achieved by the use of white products (paints), in contrast to the asphalt, color. In the night the white color of the asphalt does not guarantee the sufficient visibility of signs. This function is guaranteed by adding light-reflecting glass-beads. They can be mixed with all kinds of paints for road marking. The shape of the light-reflecting glass-beads like a colorless sphere with dimension 800 μm .



Light-reflecting effect of the road marking without glass-beads

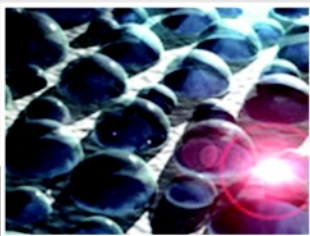


Light-reflecting effect of the road marking with glass-beads


To achieve the best effect the glass-beads must be absolutely transparent (the perfect variant) and of content without gas bubbles.

The product Intermingalss is distinguished by a high strength and absolute chemical inertness. They don't get mat under the influence of sodium and calcium chloride, they are thermo-resistant and not influenced by the impact of automobile gas emissions.

The high stickiness to various types of paints used in road marking is typical for the glass-beads. Due to their properties - hardness and sphere-shape - the glass-beads, added to the paints, considerably increase their resistance and influence the extent of road safety, especially in the night.



CHEMICAL COMPOSITION AND MOST IMPORTANT PARAMETERS:

ASPECT	Transparent glass-shaped particles, containing not more than 5% gas inclusions and not sticking to each other
Chemical composition	Micro-spheres chemically neutral and resistant. In dust with micro-spheres absence of silicones.
Coefficient of light refraction	Min 1.50
Relative mass	2.4 - 2.6 kg/ dm ³
Hardness under Moss	5.5 - 6.5 (under Rockwell 42-44 XPL)
Standard	PN /EN 1423 Sign of conformity  1137



LIGHT-REFLECTING GLASS-BEADS

GLASS-BEADS FOR LIGHT-REFLECTING DESIGNATIONS OF ROADS AND HIGHWAYS

Destination

The glass-beads form an integral part of the modern road marking and problem solution of the light refractiveness.

The glass-beads Intermingalss can be added into materials freshly applied directly on the road to ensure the signs refractiveness or during the technological production process of road marking materials.

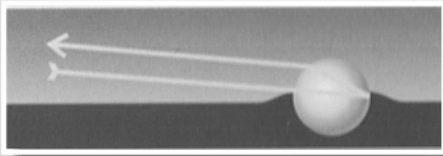
The glass-beads are used both in road marking on a thin paint coating and on a thick coating using thermo-plastic or bi-component materials with hardeners.

GENERAL INSTRUCTIONS FOR THE CONSUMERS

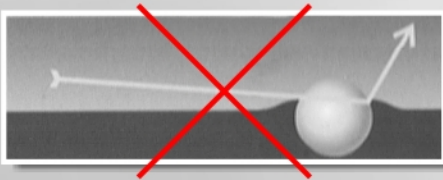
Terms of use and way of application:

To achieve a better result the glass-beads should be beaten into the road marking material, directly on the road, pressure of 1-5 atmospheres, not later than 3 sec. after the signs painting. The gravitation method to apply the glass-beads on the paint is also allowed.

To ensure the maximum volume return of refracted and reflected automobiles head-light, the half of the glass-beads must protrude over the marking and their surface must be exempt of any marking material. In this case the marking material shall hold well enough the glass-beads.



If the micro-spheres are protruded more than the half over the paint coating - the automobile wheels shall crumble them easily.



If the micro-spheres are sunk in the paint more than the half, the reflected light volume is reduced.

The granulation and the consumption of the glass-beads depend on the type of material used for the road marking application, the coating thickness and the technical sheet of the paint and the material of a manufacturer.

The standard consumption is 200-400g glass-beads per sq. meter. The micro-spheres must be mixed only with paints and materials for light-reflecting marking of roads and streets. Special sticking and flotation means and technical mixtures may be used to mix the granules with the paints in order to increase the resistance and durability of the mixture. In the course of the technological process the glass-beads absorb silicone oil.

The choice of the means of treatment of glass-beads surface depends on the type and the technical properties of the paints and materials for horizontal road marking and the way of glass beads.



Application



Consumption



0,200-0,400 kg/m²

Shelf life



12 min