

Nachleuchtdispersionssystem

-Afterglow Dispersion System- Exterior and interior

General Description

3 layers

1. Coat : water-dilutable priming coat for Afterglow Dispersion white
2. Coat : water-dilutable Afterglow Dispersion yellow-green
3. Coat : water-dilutable UV Clear Lacquer for Afterglow Dispersion colourless

Range of uses:

The Afterglow Dispersion System is used for the fixing of optical safety systems and as guidance system for escape and rescue markings (e.g. in staircases, underground garages etc.). The Afterglow Dispersion System is suitable for bituminous surfaces (mastic asphalt, asphalt concrete) and concrete surfaces (cement surfaces).

Not suitable for synthetic resin surfaces, paving surfaces (natural stone, cast stone and composite stone paving) and extensive markings.

As a floor marking, only to be used in passable areas and not in areas fit for traffic.

Product properties:

The coating is water-dilutable and phosphorescent. The Afterglow Dispersion, which is furnished with special pigments, possesses the property of being able to emit light for some time during darkness by means of exposure (stimulation). The stimulation of the Afterglow Dispersion can occur by means of UV-radiation, as well as daylight or artificial light. In order to achieve a high functionality of the Afterglow System, a strong light source should be installed close to the safety marking.

Technical Data

Product name:	1. Coat Water-dilutable priming coat for Afterglow Dispersion	2. Coat Water-dilutable Afterglow Dispersion	3. Coat Water-dilutable UV Clear Lacquer for Afterglow Dispersion
Art. No.:	40-9-1	40-9-2	40-9-3
Shade:	white	yellow-green	Colourless
Density:	1,63 g/cm ³	1,24 g/cm ³	1,04 g/cm ³
Thinner:	when required, thin with water	when required, thin with water	when required, thin with water
Recoatibility:	ca. 5 -15 min. (may not stick – dust-dry)	ca. 10 -25 min. (may not stick – dust-dry)	10 – 15 min.
Drying time/ traversability	-	-	ca. 1 hour after the final coating
(The system should be tested before the approval concerning loading capacity)			
Coat thickness to be applied:	ca. 200 μ (continuously good and even opacity is to be maintained)	min. 100 μ depending on requirement, up to 600 μ can be applied to extend the illuminating power – possible in two spraying operations	min. 60 μ when required up to max. 100 μ - possible in two spraying operations
Afterglow intensity:	-	ca. 10 to 60 min. Depending on coat thickness	-
Theoretical Consumption	ca. 0,326 kg/m ² ca. 0,20 l/m ²	ca. 0,12 kg/m ² (0,086 l/m ²) to 0,74 kg/m ² (0,5 l/m ²)	ca. 0,063 – 0,104 g/cm ³ ca. 0,100 l/m ²
Packaging sizes	1 l, 5 l	1l, 5 l	1 l, 5l

Processing temperature: min. +10 °C

Substrate temperature: +10 °C to +45 °C

Rel. air humidity at 23°C: max. 75 % (observe dew point)

Method of processing

Methods of application: The Afterglow Dispersion System can be applied by machine with commercially available marking applicators (airless resp. atomizer technology) or manually with a hand-held spray gun resp. a lamb-skin roller.

Substrate Preparation:General preparation

The substrate must be portable, dry, clean and free of separating substances (oil, grease, wax).

The substrate and eventually existent old coatings must be tested for load capacity and compatibility with the Afterglow Dispersion System to be applied (**adhesion sample/carry out trial coating**).

If several containers are used to apply the final coat, ensure batch uniformity.

The drying time can be delayed when applying markings on existent old markings. Therefore, old markings should be ideally removed by means of suitable mechanical procedures.

Concrete or cement-bound substrates

The surface constituents which hinder adhesion in the case of new surfaces (fine mortar layer/concrete sludge) must be removed by means of suitable procedures (e.g. high-pressure water, fine milling or the like). The application on concrete or cement-bound substrates can lead to the formation of blisters and problems in adhesion. For this reason, it is necessary to dilute the priming coat with water 1:1 and to pre-spray thinly (ca. 150 µ) as primer. After drying, the priming coat is applied undiluted in the appropriate coating thickness. The moisture level of the concrete when applying the priming coat may not exceed 4 %.

Bituminous substrates

All loose constituents, such as grit, are to be removed. The flux oils on the surface of new bituminous surfaces hinder adhesion of succeeding coats resp. can lead to discolouration of the marking. The application should, therefore, take place 4-8 weeks after completion of the bituminous surface.

In the case of interior application of the Afterglow Dispersion System, it has to be considered that the compression of bituminous substrates is not as extreme as on the street, meaning crack formation can occur.

The preparation of the substrate and painting must be scientifically and technically state of the art. Please also take note of the current BFS data sheets and the VOB (German Construction Contract Procedures), Part C, DIN 18363 Painting and Coating work.

Application: The Afterglow Dispersion System has to be applied in the system in the following sequence: water-dilutable priming coat, Afterglow Dispersion and water-dilutable UV Clear Lacquer.
 The respective coat thicknesses and the number of defined spraying operations are to be maintained.
The water-dilutable priming coat must be evenly spread over the entire surface in order to prevent absorption of the light.
The Afterglow Dispersion can be increased depending on the desired duration of intensity of the afterglow effect, should however not exceed 600 µ.
The water-dilutable UV Clear Lacquer protects the UV-sensitive afterglow pigments and thereby extends the working life of the Afterglow Dispersion System.

A too early drive over the surface can lead to negative phenomena such as black colouration of the surface due to tyre wear.

Example of use: Afterglow Dispersion System with
 0,400 mm Priming coat for Afterglow Dispersion
 0,600 mm Afterglow Dispersion
 0,060 mm UV Clear Lacquer for dispersion system

Light density in mcd / m ² after				Decay time
1 min.	10 min.	30 min.	60 min.	in min.
1506	194	63	28	2430

Cleansing of tools: Immediately with water.

Storage: Cool, dry and frost-free. Re-seal opened packaging well and briefly turn upside down.

VOC-Value: This agent is not subject to any VOC category.

Identification Marking: Please take note of our updated Safety Data Sheet available on the Internet at www.jansen.de

The technical information was compiled in accordance with the latest state of the art. An obligation for the general validity of the individual recommendations cannot, however, be accepted as the application and processing methods do not lie within our influence and the varying states of the substrates each require a decision as to the method of working suitable for workman and trade. The recommendations do not release the customer from the task of accepting responsibility for checking the products of the supplier company as to their suitability for the foreseen use. Applicable are the "General Terms and Conditions of Delivery and Payment in the Paint Industry" in the recommendation approved by the Federal Cartel Office (Bundeskartellamt) on 01. Januar 2018. On publication of this data sheet, all previous data sheets for this product become invalid.

