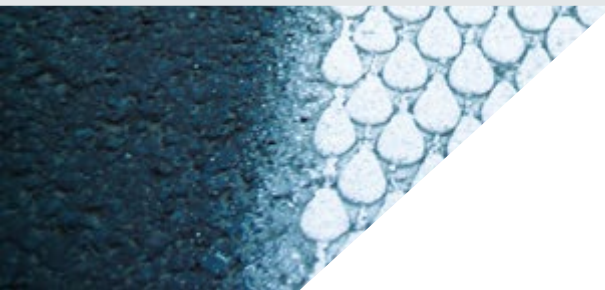
SWARCO VICAS SA

Road Marking Systems

SWARCOMARK SV 330

TECHNICAL INFORMATION



SWARCO I First in Traffic Solutions.

SWARCOMARK SV 330

Solvent borne road marking paint

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Consider our General Notes on Technical Information Sheets!
Any liability for erroneous data and printing errors is excluded.

CONTENTS

1 Main characteristics / Fields of applications 3

2 Technical Data 3

3 Processing Instructions 4

3.1 Preparation of material 4

3.2 Optimising application properties of waterborne paints 4

4 Road surface / pretreatment 4

4.1 General information 4

4.2 Concrete or cement-bound surfaces 4

4.3 Bituminous surfaces 5

4.4 Cobbled pavement 5

4.5 Floor coatings 5

5 Application techniques 5

5.1 Table 1: RPA – Test reports by AETEC (Spanish Road Institute) 5

1 Main characteristics / Fields of applications

SWARCOMARK SV 330

- is high solid, one component solvent borne paint used for road markings and airport markings.
- is showing good bead embedment and good hiding power
- is providing good resistance against abrasion
- is providing good fastness to water, salts solutions, oils and gasoline
- is suitable for both bituminous (e.g. mastic asphalt, asphaltic concrete) and concrete surfaces
- is designed for application with airless or atomising techniques
- contains aromatic solvents
- has been tested on the turntable simulator at the Spanish Institute - AETEC
- for airport markings has the colours according to ICAO Annex 14 Appendix 1 requirements

2 Technical Data

Colour	White, yellow, blue, red orange, grey, black.
Density	1,5 – 1,65 kg/l
Solid content	Min. 75%
Organic solvents content	< 25%
Viscosity	40-60 seconds, DIN 6-mm cup, at 20°C.
Thinner	The paint at delivery state is ready for processing. In general it is not necessary to add thinner but it is possible to optimise the spraying properties by adding approx. 2% thinner for solvent borne road marking paints (DILUANT TIP C). The thinner is also used for the cleaning of marking equipment.
Storage stability	12 months when stored in sealed original packaging, sheltered from frost and direct sun exposure, at 5-40 °C.
Overrollability	After the drying of the paint film. The drying times (*) are laboratory values that may differ from field conditions depending on climate (temperature, humidity, wind), material, layer thickness and road surface. Marking's overrollability must be checked before exposing paint film to traffic.
Standard packaging	**SWARCOMARK SV 330:** Metallic barrels with 30 kg filling weight. Other containers upon request. **DILUANT TIP C:** Metallic barrels with 25 L. **Drop-on material:** Paper bags with PE inlay – 25 kg filling weight.
Identification	The users must read and understand the Safety Data Sheets and always follow good workplace hygiene and safety practices. The regulations and instructions concerning appropriate transport, handling, storage, first aid measures, toxicology and ecology are stated in detail in our material Safety Data Sheets and on the product label. They must be followed.
Air temperature	5-40 °C.
Surface temperature	5-45 °C.
Relative humidity	Below 85% and below dew point (consult dew point table)

Layer thickness / Theoretical consumption	The actual consumption depends on the applied layer thickness and the type and state of the surface, with the following to be used as guidelines:

Wet film build	Dry film build	Applied mass	Theoretical consumption
300 µm	185 µm	480 g/m^2	0,3 l/m^2
400 µm	250 µm	640 g/m^2	0,4 l/m^2
600 µm	370 µm	960 g/m^2	0,6 l/m^2

3 Processing Instructions

3.1 Preparation of material

The marking paint must be homogeneously stirred in the original container before processing.

The exact machine adjustments have to be done according to the manufacturer's instructions. Layer thickness and drop-on material need to be evenly distributed. Machine adjustments are necessary if there are scattering losses.

At each work interruption, application nozzle must be cleaned.

3.2 Optimising application properties of waterborne paints

SWARCOMARK 330 is ready for use as delivered and usually does not require thinning.

Adjust spray equipment first before considering diluting the paint! It is possible to optimise the material's spray properties by adding up to 2% of thinner. When processing SWARCOMARK SV 330 at temperatures exceeding 25°C, it is recommended to add thinner.

4 Road surface / pretreatment

4.1 General information

The surface must be dry, clean, and free from grease, oil and loose gravel and other contaminations. The surface and potential existing old markings must be checked for their carrying capacity and compatibility with the material to be applied. In case of doubt, test applications and bonding checks are required. Ideally, old markings should be removed with appropriate mechanical procedures.

SWARCOMARK SV 330 is not appropriate for large surface applications.

4.2 Concrete or cement-bound surfaces

The pavement components in new road surfaces that prevent good bonding (fine mortar layer, concrete slurries) must be appropriately removed (e.g. with high pressure waterjet, fine millcut, or similarly effective methods). When applying the paint to concrete or cement-bound surfaces, bubble formation is likely occur. In order to prevent the formation of bubbles the concrete should be pretreated with SWARCOMARK SV 330 primer or SWARCOMARK SV 330 blended 1:1 with thinner as a primer (approx. 200µm film). The paint will be applied after the complete drying of the primer. Humidity of the concrete must not exceed 4% during the marking work. After rain, a waiting period of minimum 24 hours is recommended.

4.3 Bituminous surfaces

Any loose components such as chippings must be removed. Flux oils of new bituminous surfaces are detrimental to bonding of markings and may lead to discolouration. Since these oils are not removable mechanically, the surface should be either exposed to traffic for 4 – 6 weeks or initially marked with temporary paint.

4.4 Cobbled pavement

All kind of cobbled pavements are moveable surfaces. That can lead to crack formation or spalling of the marking. On such surfaces, SWARCOMARK SV 330 is used without any manufacturer's guarantee. Test applications and surface pre-treatment are recommended. Cobbled pavement must ensure proper bonding.

4.5 Floor coatings

For markings on floor, SWARCO LIMBURGER Lackfabrik indoor marking products should be used.

5 Application techniques

Solvent borne road marking paint SWARCOMARK SV 330 can be applied using conventional airless or air-assisted marking machines, or manually with brush or roller. The paint must be homogeneous before processing — if necessary, stir as needed in the original container!
The exact machine adjustments depend on the application conditions and the machine type and should be made according to the machine manufacturer's instructions. Uniform spread of marking material and drop-on material over the entire application surface must be observed. Layer thickness and drop-on material quantities must be respected. Contact your SWARCO representative for details regarding glass beads.

Durability of properly applied paint with appropriately selected SWARCO glass beads is good. Improper choice of glass beads may lead to meaningfully lower performance.

5.1 Table 1: RPA – Test reports by AETEC (Spanish Road Institute)

Test report	Layer thickness	consumption		Drop-on material (DOM)	Traffic technological properties	
	mm	Material	DOM	Identification	New condition	Used condition
		kg/m²	kg/m²			
4253	0.6	0.960	0.450	Swarcolux 30 212-1400 T14 M20	S2, R3, RW6,RR3, Q5,B5, T2*	P7, S1, R3, RW4,RR2, Q5, B5