



# ROAD MARKING SOLUTIONS

TRAFFIC | INDOOR | LEISURE



# ROAD MARKING MATERIALS FOR MAXIMUM TRAFFIC SAFETY, DURABILITY AND RELIABILITY.

## DESIGNING EXCELLENCE



### ADVANCED PRODUCTION TECHNOLOGY AND IN-HOUSE RESIN

Efficiency, innovation, and a strong commitment to quality form the foundation of KANSAI HELIOS road marking production. Our 500 m<sup>2</sup> production facility, equipped with **advanced robotic technology**, ensures **consistent, high-quality product performance and fast delivery times** – even for urgent large-scale orders.

With our **own in-house resin production**, we maintain direct control over the key raw materials that define the performance of our road marking systems. This high level of vertical integration ensures independence and enables us to respond to market developments with greater speed, flexibility, and technical precision. It also guarantees **consistent quality, optimized formulations**, and a **stable supply chain**.

### „DESIGNING EXCELLENCE“ – R&D AT THE HIGHEST LEVEL

Our research and development is based on the highest standards, extensive know-how and a passion for inventive product solutions. We drive progress and innovation in our

high-end laboratories. Looking far ahead, our experienced R&D teams formulate, develop and test high-performance coatings and paints that meet the high criteria of future product quality – especially with regard to the environment.

As part of KANSAI PAINT, one of the world's leaders in the paints and coatings industry, KANSAI HELIOS represents the European competence center of the group and serves customers in more than 60 countries worldwide.

### CREATING MORE VALUE FROM LESS RESOURCES

KANSAI HELIOS is committed to the principles of sustainable development and relies on clean, energy-saving production technologies and the responsible use of resources. Accordingly, **environmental protection and a strong ESG management** are a key focus for us, not only in product development, but along the entire value chain and in all areas of the Group.



# TRAFFIC



LANE MARKINGS



URBAN AREAS



HIGH FRICTION SURFACES



AIRPORTS



# INDOOR



PARKING GARAGES



INDUSTRIAL HALLS



WAREHOUSES



# LEISURE



PLAYGROUNDS & PUBLIC AREAS



GRASS AREAS



TRACK AND FIELD



EVENT AND SPORT AREAS



SPECIAL SURFACES

# TRAFFIC



**LANE MARKINGS**  
 Paints  
 Cold Plastics  
 Thermoplastics



**URBAN AREAS**  
 SIGNOCRYL  
 SIGNODUR G / STRUKTURAL / ROLL  
 SIGNODUR KSP  
 SIGNOFORM  
 SIGNOLINE



**HIGH FRICTION SURFACES**  
 SIGNODUR GRIP  
 SIGNODUR ROLL / REIBEPLAST  
 SIGNOPUR 2C CF



**AIRPORTS**  
 VERONIL A  
 SIGNOCRYL E  
 SIGNOCRYL 2C EPOXY



## ROAD MARKING AS A SYSTEM

Lane markings are a critical part of traffic management systems, and their performance depends on the proper integration of marking materials, glass beads, and application methods. The overall effectiveness of road markings is determined by how efficiently these elements function as a unified system:

### COATING

Must hold the glass beads securely

### GLASS BEADS

Must be evenly distributed for consistent reflectivity

### APPLICATION

Must be precise to ensure longevity and visibility





## LANE MARKINGS

Seeing and being seen are important preconditions for road safety. This also applies to road markings which can be considered an essential element of visual guidance for the road users, both in the daytime and at night – and particularly in **wet conditions**.

To ensure road markings deliver maximum **safety and durability**, all materials must undergo rigorous laboratory and/or real-life testing by independent, accredited certification bodies before they can be used on public roads. These official test certificates serve as the basis for tenders and contracts issued by national highway authorities.

We already hold certifications from **BAST (Germany)**, **AETEC (Spain)**, **VUD (Slovakia)**, **IBDiM (Poland)**, **Silniční vývoj (Czech Republic)** and **ZAG (Slovenia)**.



### CERTIFICATION PROCESS SUPPORT

If additional certification is required for a specific market, we are ready to support and initiate the process.

### ROAD MARKING PAINTS

Our road marking paint portfolio has been developed for a wide scope of target applications, in **highways, regional roads** and **urban areas**. Our **water-based marking paints** are **fast-drying with high-solid content** and have **good physical and chemical characteristics**. They outperform conventional solvent borne systems in all main characteristics without using any organic solvents and have therefore less impact on the environment.

### COLD PLASTIC

Cold plastic marking materials are based on acrylate binder and reactive monomers, where curing takes place upon the addition of a catalyst. Known for the **highest endurance** amongst all marking materials, they offer supreme durability. As solvent- and VOC-free options with long-lasting durability properties, they provide one of the most **environmentally friendly** road marking solutions according to life-cycle assessments.

### THERMOPLASTIC MARKINGS

Thermoplastics are solid form materials. They liquify at **application temperatures between 190–220°C** and are applied as hot melt. Upon cooling, material hardens rapidly, which enables **extremely short curing times**. This range of marking materials is intended for thick layer applications (1,5–7 mm) with specialized machines by extruder or with a multi-dot application.





## URBAN AREA SOLUTIONS

Cycle and pedestrian lane/area markings are playing a pivotal safety role in the mixed traffic environment. Brightly coloured delineation of lanes and paths **ensure road safety for either bicyclists or pedestrians**. They do not only operate as warning signs for drivers but offer also suitable **anti-skid resistance**.

Emerging trends in road safety focus on maximizing contrast at pedestrian crossings and adding colourful markings near schools to draw drivers' attention and protect young pedestrians. This is achieved, for example, by combining traditional white zebra stripes with a high-visibility coloured background to enhance recognition for all road users. These vividly designed surfaces draw drivers' attention to the area and increase awareness of children in traffic.



## MICROMOBILITY

Micromobility refers to lightweight, usually single-passenger vehicles designed for short-distance travel, typically under 10 km. E-scooters, bicycles, e-bikes, and shared mobility devices are common examples, which are increasingly popular in urban environments.

Road infrastructure is a critical factor in the safe and efficient integration of micromobility. This includes the use of proper road marking materials to:

- **define dedicated spaces:** Clear bike lanes, scooter zones, and shared paths reduce conflicts between micromobility users, pedestrians, and motor vehicles.
- **enhance visibility and predictability:** High-contrast markings, coloured lanes (e.g., green or red for bike paths), and directional arrows help all road users anticipate movements.
- **support compliance and safety:** Markings for crossings, buffer zones, and speed reduction areas guide behavior and minimize accidents.
- **adapt to mixed-use environments:** In shared spaces, markings can indicate priority zones, slow-speed areas, and no-parking zones for micromobility devices.

## PARKING AREAS

**SIGNODUR ROLL** is a road marking material for **heavy traffic road loads** and versatile applications from pedestrian crossings to cycle roads or larger coloured/textured surfaces, such as parking areas. Besides the decorative and marketing purposes, this marking material offers good anti-skid characteristics.

Our **SIGNOFORM** series offers preformed thermoplastic markings. Unlike classic thermoplastics, these are delivered as ready-made symbols and shapes, available in 12 RAL colours. The material comes in large pieces that fit together like a puzzle. Application is simple and requires no special machinery: the pieces are placed on a solid substrate—such as asphalt, concrete, or stone—and heated with a gas burner. The surface can be reopened to traffic again within a very short time.

**SIGNOLINE** is a spray marking paint assortment, which is ideal for fast and easy markings in parking slots and smaller renovation of existing markings for private or professional use.



## HIGH FRICTION SURFACES

**SIGNODUR GRIP** is a **two-component cold plastic coating** that provides the highest possible level of **skid-resistance** for road intercepts and other surfaces, where safety is a key issue – either for road users or pedestrians. The system is primarily designed for marking critical areas where increased safety is required — such as slippery angled curves, approaches to pedestrian crossings used as fast-braking zones, high-roughness cycle or pedestrian paths, and steps in event or sports arenas.



## AIRPORTS

Road markings intended for airports are subjected to their own certification standards and guidelines are required to exhibit the highest performance in terms of durability, weather and chemical resistance.

In our portfolio, two product types are specifically engineered for these demanding applications:

- Acrylic-based marking paints (1-component)
- Epoxy-based marking paints (2-component)

These marking systems achieve the requirements regarding chromaticity co-ordinates, luminance factor  $\beta$  and resistance to chemicals according to:

- Instructions for markings on air traffic control areas (FGSV, edition 2018)
- Annex 14, Volume I, Aerodrome Design and Operations (ICAO, 9th Edition, 2022)
- Certification Specifications and Guidance Material for Aerodrome Design (EASA, CS-ADR-DSN Issue 7, 2025)



# INDOOR



**PARKING GARAGES**  
 SIGNO PRIMER 2C PUR  
 SIGNOCRYL  
 SIGNOCRYL 2C PUR  
 SIGNOCRYL 2C EPOXY



**INDUSTRIAL HALLS**  
 SIGNO PRIMER 2C PUR  
 SIGNOCRYL  
 SIGNOCRYL 2C PUR  
 SIGNOCRYL 2C EPOXY



**WAREHOUSES**  
 SIGNO PRIMER 2C PUR  
 SIGNOCRYL  
 SIGNOCRYL 2C PUR  
 SIGNOCRYL 2C EPOXY



## SPECIFICS OF CONCRETE SUBSTRATES

On concrete, adhesion and durability of a road marking product depend on correct substrate preparation.

Concrete surfaces vary in porosity and are often treated with mortars or curing agents, which reduce coating anchorage. To ensure proper adhesion:

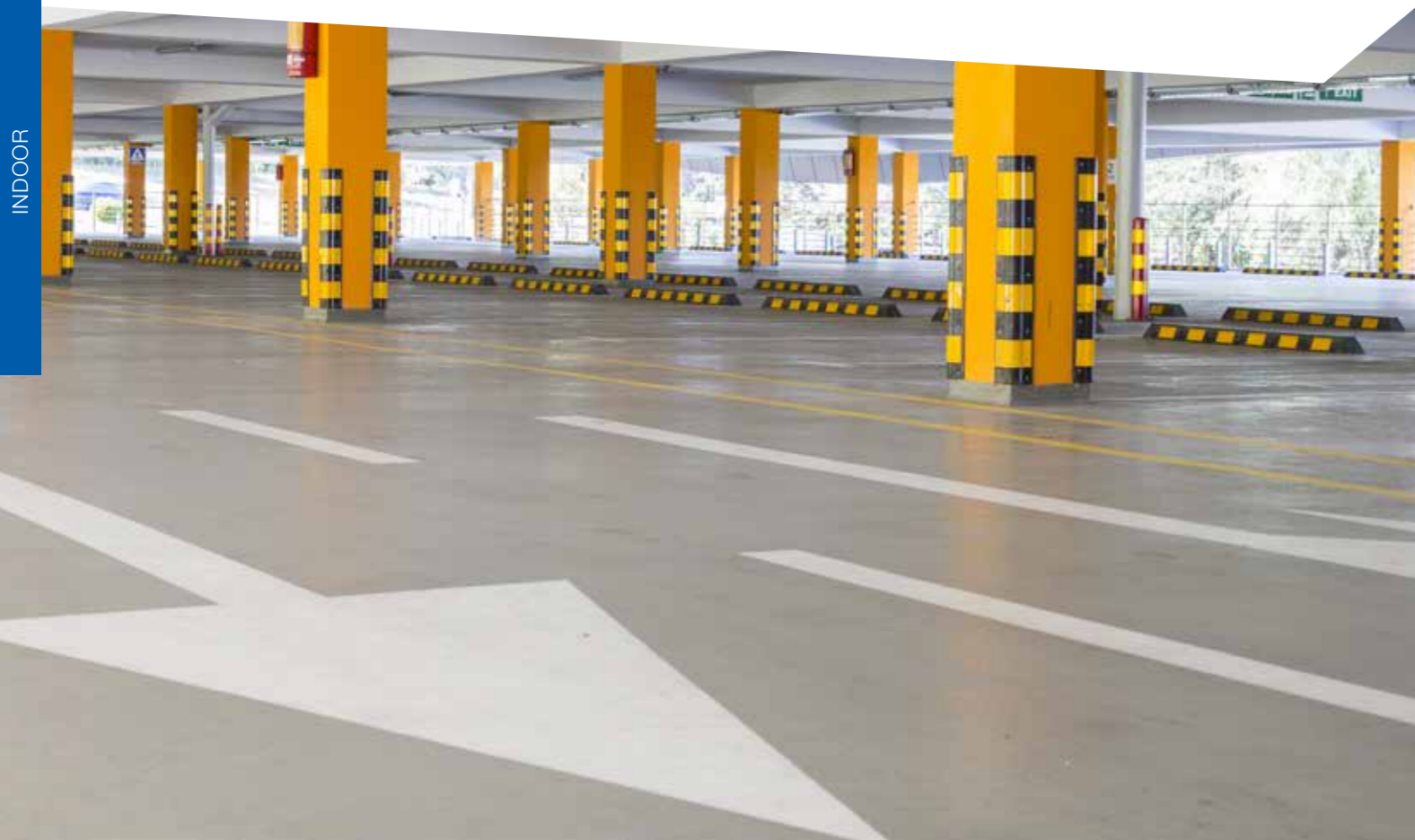
- remove cement laitance with high-pressure cleaning.
- ensure moisture content  $\leq 4\%$  and curing time  $\geq 28$  days.
- perform pull-off testing on surfaces treated with water glass.
- remove protective agents like silanes, siloxanes, silicones.

Correct preparation is essential for long-lasting, functional markings on concrete substrates.

## PARKING GARAGES, INDUSTRIAL HALLS AND WAREHOUSES

In areas exposed to heavy machinery, strong temperature fluctuations, and chemical spills, it is essential to assess the expected daily loads and dynamic stresses caused by traffic. These conditions require road marking materials with **high resistance to wear**, impacts from falling objects, and abrasion from (forklift) trucks. Additionally, UV exposure must be evaluated in advance to ensure the correct selection of coating systems with **suitable UV-stability properties**.

The application of markings in garages, industrial halls, and warehouses must be based on a clear agreement between the investor and the contractor. This agreement should define the expected scope of work as well as the required quality and purpose of the surface markings.



## SURFACE PREPARATION

Surfaces intended for marking must be dry, clean, free of dust, oils and greases and free of abrasive sands and other impurities before application. Contamination poses a high risk in ensuring quality adhesion of materials to the substrate and is often the cause of problems in finding responsibility for poor quality work.

## ADHESION QUALITY TEST METHODS

- Manual grip test (qualitatively without quantifications)
- Adhesion pull-off test on a single coating or a multi-coat system with the use of dolly in accordance with EN ISO 4624
- Cross-cut test in accordance with DIN 5315121



## OPTIMAL AND REGULAR MAINTENANCE

Markings in garages and industrial halls face chemical exposure (chlorides, fuels, oils, acids) and heavy mechanical load from vehicle traffic and dirt. They must remain durable, resistant, and visually reliable. Regular maintenance is therefore mandatory to preserve functionality and appearance of floor markings.

## CLEANING RECOMMENDATION

We recommend mechanical cleaning with a soft or medium hard brush (e.g., scrubbing machine) with PH-neutral cleaners. The basic cleaning depends also on the manufacturer's specifications. However, the optimal cleaning concept should nevertheless be discussed directly with a competent cleaning specialist.



## PROPOSED COATING SOLUTIONS

### 1. STANDARD CONCRETE SURFACES, WITHOUT SPECIAL TREATMENT:

	SURFACE PRETREATMENT	TOPCOAT	NOTE
SYSTEM 1	SIGNO PRIMER 2C PUR	SIGNOCRYL	The product type is selected according to the request

### 2. CONCRETE SURFACES ADDITIONALLY HARDENED AND SMOOTHED WITH QUARTZ SAND – SURFACES NOT CHEMICALLY TREATED:

	SURFACE PRETREATMENT	TOPCOAT	NOTE
SYSTEM 1	SIGNO PRIMER 2C PUR (only in the case of old concrete surfaces that require restoration/renewal)	SIGNOCRYL 2C PUR	Application with roller – two layers are required
SYSTEM 2		SIGNOCRYL 2C EPOXY	

### 3. VARIOUS INDUSTRIAL FLOORING (EPOXY/PU) OR ADDITIONALLY CHEMICALLY TREATED CONCRETE SURFACES:

	SURFACE PRETREATMENT	TOPCOAT	NOTE
SYSTEM 1	SIGNO PRIMER 2C PUR	SIGNOCRYL 2C PUR	Application with roller – two layers are required
SYSTEM 2		KANSAI TOP PU 31-00 50	Application with roller – two layers are required
SYSTEM 3		KANSAI TOP EP 30-00 50	
	KANSAI TOP PU 31-00 50		Second layer for accelerated hardening

# LEISURE



**PLAYGROUND AND PUBLIC AREAS**  
SIGNOCRYL AQ  
SIGNOCRYL E MIX



**GRASS AREAS**  
SIGNOSPORT



**TRACK AND FIELD**  
SIGNOCRYL 2C PUR SPORT



**EVENTS AND SPORT AREAS**  
SIGNODUR ROLL FINE



**SPECIAL SURFACES**  
SIGNOCRYL AQ KART



## PLAYGROUNDS AND PUBLIC AREAS

We offer environmentally and children friendly marking material for **decorative purposes with excellent adhesion** on asphalt or concrete surfaces, such as **SIGNOCRYL AQ**. You can create arbitrary geometric shapes and circles that can be used for playground games.

The product can be applied professionally by air/airless spraying or in a simple way by using a roller. It offers fast drying, good weather and UV resistance and a brilliant, finished outlook. **SIGNOCRYL AQ** exhibits fast drying and a good resistance against rain. For numbers, letters and similar forms in playgrounds, preforms (thermoplastics) can be used. **SIGNOCRYL E MIX** contains no aromatic solvents, lead and chromate compounds and is available as a mix system through DIY shops, offering a variety of colour shades in different small packaging units.

## GRASS AREAS

**SIGNOSPORT** is a water-based paint for the colouring of grass areas. It is suitable for line markings for football, tennis, cricket, rugby, softball and baseball fields, athletics (discus, shot put, javelin) and other decorative finishing on grass fields. This environmentally friendly fast drying paint offers good adhesion on grass and high weather resistance. It is available in any colour shade upon request.





### TRACK AND FIELD

**SIGNOCRYL 2C PUR SPORT** is a two-component polyurethane paint based on acrylic binder and aliphatic isocyanate hardener. This paint exhibits very high elasticity, high durability along with good chemical and UV resistance. It contains no aromatic solvents, lead and chromate compounds and is intended for marking of sport fields on concrete surfaces and decorative painting of plastic substrates.

### EVENT AND SPORT AREAS

**SIGNODUR** is a durable marking material for larger areas with a textured structure and is available in different colour shades. **SIGNODUR ROLL FINE** is intended for marking critical pedestrian areas with an increased need for safety, such as steps in event and sport arenas. Besides the decorative and marketing purposes, this marking material offers good anti-skid properties.



### SPECIAL SURFACES – HIGH SKID RESISTANCE

**SIGNOCRYL AQ KART** is a one-component water-based acrylic paint, exhibiting fast drying and high anti-slip properties combined with good physical-chemical characteristics. The paint does not contain any lead and chromate compounds. This product is intended for special surfaces, such as kart tracks or pedestrian paths that require high skid resistance and a durable non-fading finish. This paint is suitable for use on a variety of surfaces – asphalt, concrete, metal and wood.



PRODUCTS

ROAD MARKING PAINTS

Solid Content 100%, thickness up to 0,6mm, fast curing

SOLVENT-BASED 1C / AROMATIC-FREE SB PAINTS	DENSITY	CERTIFIED	MANUAL application	MACHINE application	WET FILM THICKNESS	RECOMMENDATION FOR USE
VERONIL A / SIGNOCRYL E	1.59	•		•	0.35–0.60 mm	Highly efficient paint for economical maintenance of all kinds of road markings
SIGNOCRYL EH	1.59	•		•	0.30–0.60 mm	Highly efficient paint for economical maintenance of all kinds of road markings with accelerated drying
REMO 110 AF	1.60	•		•	0.30–0.60 mm	Thin-layer paint with excellent physical and chemical properties, accelerated drying, high hiding power

SOLVENT-BASED 1C / AROMATIC SB PAINTS	DENSITY	CERTIFIED	MANUAL application	MACHINE application	WET FILM THICKNESS	RECOMMENDATION FOR USE
SIGNOCRYL	1.51	•		•	0.32–0.60 mm	Highly efficient paint for economical maintenance of all kinds of road markings, non-high solid
SIGNOCRYL HS	1.63	•		•	0.35–0.60 mm	For structured road markings; excellent night visibility, especially in wet conditions
SIGNOCRYL TRAFFIC / REMO 100 EQ	1.60	•		•	0.30–0.60 mm	High solid durable paint – easy application, high hiding power, high degree of brightness

WATERBORNE PAINTS	DENSITY	CERTIFIED	MANUAL application	MACHINE application	WET FILM THICKNESS	RECOMMENDATION FOR USE
SIGNOCRYL AQ	1.65	•		•	0.35–0.60 mm	Environmentally and children friendly marking material, suitable for playgrounds

SOLVENT-BASED 2C PAINTS	DENSITY	CERTIFIED	MANUAL application	MACHINE application	WET FILM THICKNESS	RECOMMENDATION FOR USE
SIGNOCRYL 2K EPOXY / REMO EPOXY	1.57	•		•	0.40–0.60 mm	For markings exposed to high loads; very short drying time, used also on concrete surfaces
SIGNOCRYL TRAFFIC 2C PUR	1.51	•		•	0.35–0.43 mm	Fast drying, high performance, two-component paint for high traffic loads
SIGNOCRYL 2C PUR	1.21		•	•	0.44–0.52 mm	For additionally hardened and/or chemically treated concrete surfaces
SIGNOCRYL 2C PUR SPORT	1.30		•	•	0.50 mm	For marking of sport fields on concrete and synthetic substrates
SIGNOPUR 2C SF	1.90		•		0.30–0.60 mm	Semi-rigid, slip resistant, weather and UV durable coating with high abrasion resistance

1C PAINTS FOR SPECIAL PERFORMANCE REQUIREMENTS	DENSITY	NON-AROMATIC	AROMATIC	WATER-BORNE	MANUAL application	MACHINE application	RECOMMENDATION FOR USE
VERONIL A	1.59	•				•	Intended for hot climates due to slow drying
REMO 100 AF	1.61	•				•	For larger surfaces
REMO 200 AF	1.60	•				•	Coating resistance in traffic at thin applications
SIGNOCRYL TRAFFIC	1.60		•			•	Improved embedment of glass beads in transverse markings
SIGNOCRYL HT	1.60		•			•	Intended for hot climates due to slow drying
REMO 200 EQ	1.50		•			•	Coating resistance in traffic at thin applications
SIGNOCRYL AQ KART	1.60			•	•		For surfaces where high slip resistance is required
SIGNOSPORT	1.45			•	•	•	For the colouring of grass areas

COLD PLASTIC SYSTEMS

Solid Content 100%, thickness up to 1mm, fast curing

COLD SPRAY PLASTIC	DENSITY	CERTIFIED	WET FILM THICKNESS	RECOMMENDATION FOR USE
SIGNODUR KSP	1.55	•	0.3–1.0 mm	Intended for marking highly loaded areas with low material consumption
SIGNODUR KSP EQ	1.65	•	0.3–0.6 mm	Intended for marking highly loaded areas with low material consumption, higher elasticity
REMO P DUAL	1.60		0.25–0.6 mm	Optimal system for night visibility in wet conditions with low material consumption
REMO 401	1.75		0.25–0.8 mm	Mainly used for Type I or Type II markings with excellent night visibility

Solid Content 100%, thickness up to 7mm, fast curing

COLD PLASTIC	DENSITY	CERTIFIED	MANUAL application	MACHINE application	WET FILM THICKNESS	RECOMMENDATION FOR USE
SIGNODUR STRUKTURAL	1.84	•		•	1.5–7.0 mm	For structured road markings, excellent night visibility, especially in wet conditions
SIGNODUR STRUKTURAL EQ / REMO 2000 EQ STRUKTUR	1.88	•		•	1.5–7.0 mm	For structured road markings; excellent night visibility with higher elasticity properties
SIGNODUR G / REMO 2000	1.85	•	•		2.0–2.5 mm	Excellent long-lasting night visibility
SIGNODUR G REIBEPLAST	1.85		•		2.0–7.0 mm	For unstructured surfaces with increased anti-slip properties
SIGNODUR ROLL / REMO 2000 RL	1.65	•	•		2.0–2.5 mm	Optimal for road signs and bicycle paths, excellent anti-skid properties, durable bead adhesion
SIGNODUR ROLL FINE	1.85		•		1.8 mm	For marking critical pedestrian areas such as steps

COLD PLASTIC FOR SPECIAL PERFORMANCE REQUIREMENTS	DENSITY	CERTIFIED	MANUAL application	MACHINE application	WET FILM THICKNESS	RECOMMENDATION FOR USE
SIGNODUR STRUKTURAL LV	1.89			•	1.5–7.0 mm	Adapted physical properties enable faster machine application
SIGNODUR STRUKTURAL LD	1.55			•	1.5–7.0 mm	Adapted physical properties ensure lower consumption
SIGNODUR GRIP	0.96		•		3.0 mm	For most critical areas with an increased need for safety (skid resistance)

THERMOPLASTIC MARKINGS

Solid Content 100%, thickness up to 7mm, fast curing

PRODUCTS	DENSITY	CERTIFIED	MANUAL application	MACHINE application	WET FILM THICKNESS	RECOMMENDATION FOR USE
SIGNOTHERM	2.00		•	•	min. 2.0 mm	Durable, abrasion resistant, VOC-free, prolonged night visibility
SIGNOFORM						Prefabricated thermoplastic – low labor effort, minimal lead times and high durability



[www.kansaihelios-roadmarkings.com](http://www.kansaihelios-roadmarkings.com)

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