

SW SMALTO LC

Two-component water-based, semi-gloss coloured epoxy enamel, specific for tinting systems



CE marking:

→ EN 13813 • Designation: SR-B2,0-AR0,5-IR4



TECHNICAL FEATURES



WATERPROOF



STAIN RESISTANT



SLOW CURING



CARRIAGEABLE

FIELD OF APPLICATION



INTERIORS

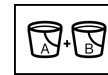


INT. FLOORS



IND. SHEDS

APPLICATIONS



2 PART



ROLLER

Description

SW SMALTO LC is a colored bi-component epoxy enamel, water-based, composed of:

- component A: mixture of liquid epoxy prepolymers and additives;
- component B: copolymerization amine, pigments, additives and water.

Once cured, SW SMALTO LC gives rise to a film impermeable to water and oils with a higher vapor permeability than traditional solvent-free epoxy resins.

In addition, SW SMALTO LC shows excellent adhesion to the substrate and good general chemical resistance.

SW SMALTO LC is available in a wide range of colours on request.

In COLORABLE version, SW SMALTO LC is designed for universal tinting systems.

CE Marking

► EN 13813

SW SMALTO LC complies with the principles envisaged in the EN 13813 standard ("Screed material and floor screeds - Screed materials: Properties and requirements") with the following designation:

→ SR – B2,0 – AR0,5 – IR4

- Synthetic resin (SR) based screed.
- Adhesion strength: > 2.0 MPa (B2.0).
- BCA wear resistance: < 50 microns (AR0.5).
- Impact resistance: 4 Nm (IR4).

Colour

SW SMALTO LC is available in a wide range of colors or in a neutral version (COLORABILE), to be pigmented with the specific coloring pastes of the TINTING SYSTEM WB for water-based systems. Nord Resine also produces colors upon specific request.

In case of intense blue and green colours, it is recommended to use a transparent finish (glossy or matt) as a finishing coat within 12-24 hours of applying SW SMALTO LC (see § Useful application tips

For further information, please contact the Nord Resine Technical Service at color@nordresine.com.

Field of application

SW SMALTO LC It is used in the coating of industrial concrete surfaces on walls and floors.

► Floor-standing

- Creation of colorful stain and dust-resistant coatings for quartz-finished industrial concrete surfaces, particularly suitable for dust and waterproofing protection of floors in meeting rooms, entrance and reception areas of public buildings, stores, warehouses and dry goods storage areas with handling by soft-wheel

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trolleys.

► Wall-mounted

- Creation of wall coverings in the fresh produce processing industry, bakeries, ham factories where high pressure water cleaning does not occur.
- Creation of waterproof and easily sanitized walls in public bathrooms and showers (also in the industrial sector).

Advantages

- SW SMALTO LC is very cheap.
- SW SMALTO LC is very easy to apply and can also be applied by non-specialized personnel because in practice it is used as a normal paint, especially for use on the wall.
- SW SMALTO LC gives rise to a highly waterproof and wash-resistant film.

General preparation of the laying surface

- The substrate must be carefully examined to be sure that it is a suitable and structurally sound base. Especially on plastered walls, the compressive strength of the supporting mortar must be high.
- SW SMALTO LC is not recommended for damp environments on lime-based plaster.

Specific preparation of the laying substrate

► *On new concrete on the floor*

Check the wettability of the laying substrate. If the surface is poorly wettable or water repellent, perform an acid wash with NORDECAL FORTE GEL (see Technical Data Sheet). Alternatively, diamond grinding can be performed with suitable grinding wheels to open the pore without scratching deeply.

► *On old concrete floor*

- Wash with STRIPPER diluted in water 5 times (see Technical Data Sheet) brushing mechanically with a single disc machine equipped with a brown Scotch Brite® disc.
- Rinse thoroughly and suck up the resulting liquid. This will remove dust, dirt, mold and soluble grease.

NOTE: if the surface is polluted by oils, old adhesives or paints, efflorescence, rust or other, proceed to a diamond grinding with accessory suitable to open the pore without scratching deeply.

► *Old porous floors with problems of poor cortical resistance*

- Consolidate the substrate by impregnating with one or more coats of SW SOLID diluted 4 to 7 times in water (depending on the absorption of the substrate, see Technical Data Sheet).

► *On new or old concrete walls*

- Grind the surface with diamond disc grinding wheels.
 - New surfaces must be skimmed with GROVE RASANTE (grit 0.6 mm, see Technical Data Sheet) or with W3 IMPERMEABILIZZANTE (grit 0.3 mm, see Technical Data Sheet).
- Old surfaces, on the other hand, must necessarily be shaved with W3 IMPERMEABILIZZANTE.

► *On new plasterboard walls*

- Skim with RASANTE 2000 2K (see Technical Sheet) or W3 IMPERMEABILIZZANTE by reinforcing with GLASS MESH (type AR, alkali resistant) from 75 - 90 g/m².

► *On painted plaster walls*

- Remove the surface bark with a diamond grindstone.
- Smooth with RASANTE 2000 2K or W3 IMPERMEABILIZZANTE.

► *On new walls finished with fine lime-based mortar*

- Due to the low resistance of the lime mortar layer, it is necessary to completely remove this layer with a diamond grinder.
- Smooth with RASANTE 2000 2K or W3 IMPERMEABILIZZANTE.

Product preparation

- Pour SW SMALTO LC Comp. A in comp. B and mix thoroughly with a professional mechanical mixer until

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the mixture is homogeneous.

- Any form of manual mixing is excluded.
- If the package is partially used, weigh the two components with a scale according to the quantities indicated on the label under "Mixing ratio (by weight)".

Product application

- Apply by roller, brush or spray.
- If necessary, correct the viscosity of the mixture by adding water of 10 - 15% by weight to the weight of A+B.
- Apply in two coats one day apart.
- The end of the useful life of the product once the A+B mixture has been made does not manifest itself with visible signs (increase in temperature and/or increase in the viscosity of the product).

Do not dilute the product to restore its fluidity.

Consider as maximum time for application at +23°C, 40 minutes from the time of mixing A+B.

At any degree of temperature above +23°C, reduce the useful life time by 3 min (e.g. at +30°C consider 19 min).

Consumption

type of application	minimum consumption	maximum consumption	u.m.	notes
To make a coating thickness (0.15 - 0.20) mm	0,30	0,35	kg/m ²	(1)

(1) add 10-15% water on A+B

Tool cleaning

- Fresh product: cleaning with water (also hydrowashing).
- Hardened product: mechanical removal, specific paint strippers (GEL STRIPPER or FLUID STRIPPER) or heat gun.

Useful tips for laying

- Do not use at temperatures below +10°C.
- In case of partial use of the pre-weighed package, observe the cross-linking weight ratios indicated on the label.

Always weigh components accurately.

- It is recommended to use COAT LUX as a glossy finish, while as a matt finish it is recommended COAT MAT (see Technical Data Sheets).
- Read the Safety Data Sheet carefully before use.

Technical Data

► PRODUCT IDENTIFICATION DATA	value	
Density at 23°C (Component A), EN ISO 2811-1	kg/L	1,141 ± 0,005
Density at 23°C (component B), EN ISO 2811-1	kg/L	1,457 ± 0,005
Color (Component A)	-	Transparent liquid
Color (Component B)	-	Colored liquid (depends on tint)

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► APPLICATION DATA AND FINAL PERFORMANCE		value
Mixing ratio by weight (A:B)	-	1,0 : 5,7
Density at 23°C (mixture A+B), EN ISO 2811-1	kg/L	1,402 ± 0,008
Pot-life (viscosimetric), double viscosity A+B, EN ISO 9514	Min	40 ± 10
Surface drying time (23°C, 50%RH), EN ISO 9117-3	Hours	8 ± 1
Full curing time (at 23°C, 50% RH)	days	7
Minimum application temperature	°C	+10
Water vapour permeability (μ), dry cup method, total thickness 0.20 mm, DIN 52615	-	30 000 ± 2 000
Resistance to UV and condensation cycles, cycle A (8 hours UVA-340 + 4 hours condensate 50°C), 168 hours overall, yellowing measurement, RE, ASTM D 4329	-	14 ± 1
UV and condensate cycle resistance, A cycle (8 hours UVA-340 + 4 hours condensate 50°C), 168 hours overall, opacification measurement, RGloss, ASTM D4329	-	46 ± 2
Wear resistance – Taber method, grinding wheel CS17, 1000 rpm, load 1 kg, expressed per 100 rpm, EN ISO 5470-1	Mg	132 ± 2

► TECHNICAL DATA IN ACCORDANCE WITH EN 13813		value
Bond strength, EN 13892-8	Mpa	2,6 ± 0,3
BCA wear resistance, wear depth, EN 13892-4	μm	15 ± 3 Class AR 0,5
Impact resistance (class), measured on MC coated concrete samples (0.40) according to EN 1766, EN ISO 6272-1	N-m	4,0 ± 0,5 Class IR 4

► CHEMICAL RESISTANCE EN ISO 2812-1 (method 2): 1 = disintegration of the product, 5 = no alteration. NOTE: For the full scale see Appendix A		value
Hydrochloric acid 30% in water	-	1-2
Sulfuric acid 10% in water	-	3
Phosphoric acid 20% in water	-	1-2
Acetic acid 30% in water	-	1
Ammonia 15% in water	-	5
Hydrogen peroxide 3.5% (12 volumes)	-	5
Mixture of acetic acid (1%) and hydrogen peroxide (0.5%) in water	-	4
Ethyl acetate	-	5
Denatured ethyl alcohol	-	4
Technical acetone	-	5

Product storage

- 24 months in the closed original packaging, in a dry and covered place away from direct sunlight, at a temperature between +5°C and +30°C.
- Protect the product against frost.

Packaging

VARIANT	PACKAGE	ADR	PACKAGE / PALLET	COMPONENTS	NOTES
RAL 7040	kit (A+B) - 6.7 kg	P*	-	A = 1 kg (plastic jar) B = 5.7 kg (plastic bucket)	-
RAL 7040	(A+B) - 20.1 kg	SI'	-	A = 3 kg (jerry can) B = 17,1 kg (plastic bucket)	-
COLORABLE	kit (4A+4B) - 3.40 kg	P*	-	A = 0,15 kg (busta) B = 0.7 kg (can)	(1)
COLORABLE	kit (A+B) - 5.67 kg	P*	-	A = 1 kg (plastic jar) B = 4,67 kg (plastic bucket)	(2)

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VARIANT	PACKAGE	ADR	PACKAGE / PALLET	COMPONENTS	NOTES
COLORABLE	(A+B) - 17.02 kg	SI'	-	A = 3 kg (jerry can) B = 14.02 kg (plastic bucket)	(3)
TIER 1 COLOUR	kit (A+B) - 6.7 kg	P*	-	A = 1 kg (plastic jar) B = 5.7 kg (plastic bucket)	-
TIER 1 COLOUR	(A+B) - 20.1 kg	SI'	-	A = 3 kg (jerry can) B = 17,1 kg (plastic bucket)	-
TIER 2 COLOUR	kit (A+B) - 6.7 kg	P*	-	A = 1 kg (plastic jar) B = 5.7 kg (plastic bucket)	-
TIER 2 COLOUR	(A+B) - 20.1 kg	SI'	-	A = 3 kg (jerry can) B = 17,1 kg (plastic bucket)	-
TIER 3 COLOUR	kit (A+B) - 6.7 kg	P*	-	A = 1 kg (plastic jar) B = 5.7 kg (plastic bucket)	-
TIER 3 COLOUR	(A+B) - 20.1 kg	SI'	-	A = 3 kg (jerry can) B = 17,1 kg (plastic bucket)	-
TIER 4 COLOUR	kit (A+B) - 6.7 kg	P*	-	A = 1 kg (plastic jar) B = 5.7 kg (plastic bucket)	-
TIER 4 COLOUR	(A+B) - 20.1 kg	SI'	-	A = 3 kg (jerry can) B = 17,1 kg (plastic bucket)	-

NOTES:

(1) Box containing 4 kits of 0.85 kg (A+B) of colorable product. To color the 0.700 kg component B, add 0.155 kg of pigment pastes from the WB TINTOMETRIC SYSTEM FOR WATER-BASED SYSTEMS by NORD RESINE or other pigment pastes for water-based epoxy systems.

(2) To colour the 4.67 kg component B, add 1.03 kg of pigment pastes from the WB TINTOMETRIC SYSTEM FOR WATER-BASED SYSTEMS by NORD RESINE or other pigment pastes for water-based epoxy systems.

(3) To colour the 14.02 kg component B, add 3.08 kg of pigment pastes from the WB TINTOMETRIC SYSTEM FOR WATER-BASED SYSTEMS by NORD RESINE or other pigment pastes for water-based epoxy systems.

ADR legend:

NO = NON-DANGEROUS goods

P* = DANGEROUS goods packed in limited quantities (packed as per ADR Chapter 3.4)

SI = DANGEROUS Goods

LEGAL NOTES

Any advice concerning the methods of use of our products reflects the current state of knowledge and does not imply any guarantee and/or responsibility as to the outcome of the application. Consequently, the customer must verify the product's suitability for the intended use and purposes by testing the product in advance. The Internet website www.nordresine.com contains the latest revision of this technical sheet: in case of any doubts, verify the date of revision (where missing, use the date of issue) by consulting the "PRODUCTS" section.

EDITION

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